Brown Oxide

Safety Data Sheet
Matte Brown Oxide Pigment Powder

SECTION 1: Identification

1.1 Product identifier

Product name	Matte Brown Oxide Pigment Powder
Product number	B-083-color-7
Brand	Bulk Apothecary

1.4 Supplier's details

Name	Bulk Apothecary
Address	115 Lena Dr Aurora OH 44202 United States
Telephone	1-888-728-7612
email	sales@bulkapothecary.com

1.5 Emergency phone number(s)

Domestic: 1-800-633-8253 International: 801-629-0667

SECTION 2: Hazard identification

General hazard statement
Not a hazardous substance or mixture.

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

2.2 GHS label elements, including precautionary statements

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

1. Iron (III) oxide

Concentration	100 % (weight)

OSHA Annotated Table Z-1, www.osha.gov

REL (Inhalation): 5 mg/m3Ędust and fume) (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Safety glasses with side shields or goggles

Skin protection
Wear rubber gloves. Wash hands after use

Body protection
Use NIOSH/MSHA approved air-purifying respirator to control exposure

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Free Flowing Powder
Odor	Odorless
Odor threshold	
pH	
Melting point/freezing point	
Initial boiling point and boiling range	
Flash point	
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability limits	
Vapor pressure	
Vapor density	
Relative density	
Solubility(ies)	
Partition coefficient: n-octanol/water	
Auto-ignition temperature	
Decomposition temperature	
Viscosity	
Explosive properties	
Oxidizing properties	

SECTION 10: Stability and reactivity

10.1 Reactivity
Stable

10.2 Chemical stability
Stable

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

No data

SECTION 12: Ecological information

Toxicity
No data

SECTION 13: Disposal considerations

Disposal of the product
Dispose of in accordance with all applicable federal, state and local regulations. Material may be sent to an approved landfill or licensed treatment, storage and disposal facility.

SECTION 14: Transport information

DOT (US)
Not regulated

IMDG
Not regulated

IATA
Not regulated

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

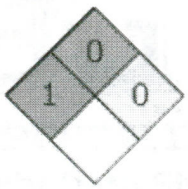
New Jersey Right To Know Components
Common name: IRON OXIDE
CAS number: 1309-37-1

Pennsylvania Right To Know Components
Chemical name: Iron oxide
CAS number: 1309-37-1

HMIS Rating

Matte Brown Oxide Pigment Powder	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall Bulk Apothecary be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if Bulk Apothecary has been advised of the possibility of such damages.

CAS no. 1309-37-1

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Remove to fresh air immediately. Contact physician if necessary.
In case of skin contact	Removed contaminated clothing and wash with soap and water.
In case of eye contact	Flush immediately with copious amounts of water. Contact physician if necessary.
If swallowed	Drink plenty of water and consult a physician.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Carbon dioxide, dry chemical or foam recommended

5.3 Special protective actions for fire-fighters
Fire personel should wear Self-contained breathing apparatus (SCBA) and full protective clothing

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Safety glasses with side shields or goggles and rubber gloves. Provide adequate general mechanical exhaust.

6.2 Environmental precautions
Prevent material from contaminating soil or entering sewerage and drainage systems.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Store in a cool, dry place. Keep away from excessive heat. Use in a well ventilated area. Wash hands after use.

7.2 Conditions for safe storage, including any incompatibilities
Store in tightly closed containers in ambient location.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Iron oxide (CAS: 1309-37-1)
PEL (Inhalation): 10 (fume) mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

PEL (Inhalation): 5 mg/m3Ęfume) (Cal/OSHA)

L. CORNELISSEN & SON

Artists' Colourmen

Suppliers of Materials for Painters, Gilders & Printmakers

Safety Data Sheet according to Directive 91/155/EC

Revision Date: June 2013

1) Identification of the substance/preparation and the company

Trade Name: Cornelissen Cadmium Pigments. Includes: Cadmium Yellow Lemon, Cadmium Yellow Light, Cadmium Yellow Middle, Cadmium Yellow Deep, Cadmium Yellow Orange, Cadmium Red, Cadmium Red Deep, Cadmium Vermillion, Cadmium Brown.

Application: Artists' Pigment

Manufacturer/Supplier:

L Cornelissen & Son Ltd
105 Great Russell Street
London WC1B 3RY

Tel: 020 7636 1045
Fax: 020 7636 3655

www.cornelissen.com

2) Composition/Information on ingredients

Inorganic Pigment: Cadmium zinc sulphide yellow 50-100%

CAS No: 8048-07-5

EINECS No: 232-466-8

3) Hazards Identification

Labelling: Not necessary.

Inhalation: Excessive exposure may cause damage to the lungs and kidneys.

Ingestion: The product is of low solubility in body fluids and it is likely to be of low acute toxicity.

Eyes: May cause physical irritation and inflammation.

Skin: The material is not a primary irritant, but as with any abrasive powder it may give rise to minor irritation.

4) First Aid Measures

Eye contact: Wash immediately with copious amounts of water.

Skin contact: Remove contaminated clothing. Wash skin with soap & water & rinse thoroughly.

Inhalation: Remove patient to fresh air, loosen clothing and seek medical attention.

Ingestion: Do not induce vomiting, seek medical advice.

5) Fire Fighting Measures

Extinguishing Media: Suitable for surrounding fire conditions.

Unusual fire and explosive hazards: None but in the event of a fire the product may give off toxic fumes.

Personal Protective Equipment: Self contained breathing apparatus.

6 Accidental Release Measures

Leaks and Spills: Avoid formation of dust. Clean up with appropriate personal protective equipment. Use vacuum equipment where possible. Otherwise damp down and scoop into receptacle.

Personal Protective Equipment: Respiratory protective equipment.

7) Handling and Storage

Handling: Do not eat, drink or smoke in areas where the material is used. Wash thoroughly after handling.

Storage: A moderately dry, well ventilated area is considered suitable for handling and storage.

8) Exposure/Personal Protection

Engineering Controls: Adequate ventilation should be provided so that occupational exposure limits are not exceeded. Local exhaust ventilation normally recommended. Where local exhaust ventilation is not practical and exposure is likely to be excessive:

Respiratory protection: Use mask during work in unventilated and dusty spaces.

Skin protection: Wear suitable protective gloves and clothing.

Eye protection: Use safety glasses

9) Physical and chemical Properties

Appearance: Powder

Odour: None

Boiling point: N/A

Melting point: >1000°C

Flash point: N/A.

Ph: 5-8

Solubility: Insoluble in water.

Flammability: N/A.

Extinguishing media: No restriction

10) Stability and Reactivity

Stability: Stable under normal conditions of storage and use.

Hazardous reactions: Concentrated acids may release toxic and flammable Hydrogen Sulphide gas.

11) Toxicological Information

Acute Toxicity: Oral Toxicity: LD50 (rat)>5g/Kg

Health Effects: Prolonged or repeated exposure above occupational exposure standards may cause lung or kidney damage.

12) Ecological Information

Ecotoxicity: Fish toxicity: LC50: > 1000 mg/l

Daphnia toxicity: EC50: 20 mg/l (48h)

Persistence: The product is chemically stable and will persist in the environment.

Further information: Water hazard class: 1

13) Disposal Information

Examine possibilities for recycling.

Return large quantities to the manufacturer.

Dispose in accordance with all applicable local & national regulations. Consult with authorities and take to special waste disposal site. Do not burn product.

14) Transport Information

Not classified as dangerous cargo.

Keep separated from foodstuffs.

15) Regulatory Information

This product is not a substance subject to mandatory marking within EC Directive 67/548/EC.

Safety Phases:

S21 When using do not smoke.
S20 When using do not eat or drink.
S13 Keep away from food, drink and animal feeding stuffs.
S07 Keep container tightly closed

UK Occupational Exposure Limits:

Cadmium pigments (respirable dust) 0.04 mg/m^3 8 hr TWA

16) Other information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

40012 French Ochre, very light

1. Identification of the Substance/Mixture and of the Company/Undertaking

1. 1. **Product Identifier**

Product Name: *French Ochre, very light*

Article No.: *40012*

1. 2. **Relevant identified Uses of the Substance or Mixture and Uses advised against**

Identified uses:

Coloring agent

Uses advised against:

1. 3. **Details of the Supplier of the Safety Data Sheet (Producer/Importer)**

Company: *Kremer Pigmente GmbH & Co. KG*

Address: *Hauptstr. 41-47, 88317 Aichstetten, Germany*

Tel./Fax.: *Tel +49 7565 914480, Fax +49 7565 1606*

Internet: *www.kremer-pigmente.de*

EMail: *info@kremer-pigmente.de*

Importer: --

1. 4. **Emergency No.**

Emergency No.: *+49 7565 914480 (Mon-Fri 8:00 - 17:00)*

2. Hazards Identification

2. 1. **Classification of the Substance or Mixture**

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Classification according to Directive No. 67/548/EC or No. 1999/45/EC

The material is not subject to classification according to EC lists.

Safety Phrases:

Possible Environmental Effects:

2. 2. **Label Elements**

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

Other Hazards

next page: 2

2. 3.

3. Composition/Information on Ingredients

3. 1. **Substance**

3. 2. **Mixture**

Chemical Characterization: *Natural yellow earth from France: Kaolin + Goethite. SiO_2 + AlO_3 + FeO_3. Pigment Yellow 43, C.I. 77492*

Information on Components / Hazardous Ingredients:

Additional information:

Exempted from the mandatory REACH Registration (Annex V).

4. First Aid Measures

4. 1. **Description of the First Aid Measures**

General information:

No special measures required.

After inhalation:

Take affected person to fresh air.

After skin contact:

Wash with soap and rinse with plenty of water.

After eye contact:

Rinse open eyes with plenty of water. In case of discomfort seek medical help.

After ingestion:

If symptoms persist consult physician.

4. 2. **Most important Symptoms and Effects, both Acute and Delayed**

Symptoms:

No further information available.

Effects:

4. 3. **Indication of any Immediate Medical Attention and special Treatment needed**

Treatment:

No special first-aid measures necessary.

5. Fire-Fighting Measures

5. 1. **Extinguishing Media**

Suitable extinguishing media:

Foam, carbon dioxide (CO_2), extinguishing powder, water spray.

Unsuitable extinguishing media:

None known.

5. 2. **Special Hazards arising from the Substance or Mixture**

Special hazards:

Do not inhale fumes.

5. 3. **Advice for Firefighters**

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

6. Accidential Release Measures

6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Avoid formation of dust.
Wear protective clothing.

6. 2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6. 3. Methods and Material for Containment and Cleaning Up

Methods and material:

Clean up mechanically. Avoid dust formation.

6. 4. Reference to other Sections

Dispose of contaminated material according to Section 13.

7. Handling and Storage

7. 1. Precautions for Safe Handling

Instructions on safe handling:

Avoid formation and deposition of dust. Provide adequate ventilation.

Hygienic measures:

Wash hands at the end of work. Preventive skin protection recommended.

7. 2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in a cool and dry place.

Requirements for storage areas and containers:

No special measures necessary.

Information on fire and explosion protection:

Do not store together with: foodstuffs, beverages and feed.

Storage class (VCI):

10-13

Further Information:

7. 3. Specific End Use(s)

Further information:

8. Exposure Controls/Personal Protection

8. 1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900
TLV: 10 mg/m3 inhalable fraction (general dust limit)
TLV: 1.25 mg/m3 air-borne fraction (general dust limit)

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8. 2. **Exposure Controls**

Technical protective measures:

Provide adequate ventilation.

Personal Protection

General protective measures:

Do not inhale dust. Do not eat, drink or smoke while working. Wash hands before breaks and at the end of work.

Respiratory protection:

In case of formation of dust.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

Eye protection:

Safety glasses (EN 166)

Body protection:

Environmental precautions:

9. Physical and Chemical Properties

9. 1. **Information on Basic Physical and Chemical Properties**

Form:	*powder*
Color:	*bright yellow*
Odor:	*odorless*
Odor threshold:	*No information available.*
pH-Value:	*7*
Melting temperature:	*1340°C*
Boiling temperature:	*not applicable*
Flash point:	*not combustible*
Evaporation rate:	*not applicable*

Flammability (solid, gas):	*not applicable*
Upper explosion limit:	*no information available*
Lower explosion limit:	*no information available*
Vapor pressure:	*not applicable*
Vapor density:	*No information available.*
Density:	
Solubility in water:	*insoluble*
Coefficient of variation (n-Octanol/Water):	*no information available*
Auto-ignition temperature:	*not applicable*
Decomposition temperature:	*No data available.*
Viscosity, dynamic:	*not applicable*
Explosive properties:	*not applicable*
Oxidizing properties:	*no information available*
Bulk density:	*466 g/l*

9. 2. **Further Information**

Solubility in solvents:	
Viscosity, kinematic	
Burning class:	
Solvent content:	
Solid content:	
Particle size:	
Other information:	*No further information.*

10. Stability and Reactivity

10.1. **Reactivity**

Stable if used according to specifications.

10.2. **Chemical Stability**

Stable if used according to specifications.

10.3. **Possibility of Hazardous Reactions**

None if handled and stored according to specifications.

10.4. **Conditions to Avoid**

Conditions to avoid:

No information available.

Thermal decomposition:

No further information available.

10.5. **Imcompatible Materials**

No information available.

10.6. **Hazardous Decomposition Products**

No information available.

10.7. **Further Information**

11. Toxicological Information

11. 1. **Information on Toxicological Effects**

Acute Toxicity

No information available.

LD50, oral:

LD50, dermal:

No information available.

LC50, inhalation:

No information available.

Primary effects

Irritant effect on skin:

No irritant effect known.

Irritant effect on eyes:

Dust may irritate eyes.

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No relevant data found.

Mutagenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

No relevant data found.

Additional toxicological information:

Acute or chronic effects are not expected.

12. Ecological Information

12. 1. Aquatic Toxicity

No toxicity expected.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

12. 2. Persistency and Degradability

No information available.

12. 3. Bioaccumulation

No information available.

12. 4. Mobility

Product is not water soluble.

12. 5. Results of PBT- und vPvP Assessment

No data available.

12. 6. Other Adverse Effects

Water hazard class:

Behaviour in sewage systems:

Further ecological effects:

Natural product. Environmentally not hazardous.

AOX Value:

13. Disposal Considerations

13. 1. Waste Treatment Methods

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Uncontaminated packaging may be recycled.

Waste Code No.:

14. Transport Information

14. 1. UN Number

ADR, IMDG, IATA

14. 2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR (land transportation).

IMDG/IATA:

No hazardous goods according to IMDG.

14. 3. **Transport Hazard Classes**

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. **Packaging Group**

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. **Environmental Hazards**

None

14. 6. **Special Precautions for User**

Not classified as a dangerous good under transport regulations.

14. 7. **Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code**

14. 8. **Further Information**

15. Regulatory Information

15. 1. **Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture**

Water hazard class:

0, not hazardous (German Regulation)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

15. 2. **Chemical Safety Assessment**

Exempted from the mandatory REACH Registration (Annex V).

15. 3. **Further Information**

16. Other Information

This product should be stored, handled and used in accordance

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with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.

Colorer votre vie au naturel

FICHE DE DONNEES DE SECURITE Conforme au règlement (CE) n°1907/2006 (REACH),n°2015/830

SAFETY DATA SHEET

Rubrique 1 :IDENTIFICATION OF THE SUBSTANCE, THE PREPARATION AND THE COMPANY

1.1 Identification of the substance / mixture

OCRE GRISE C (C grey ochre)

1.2Relevant identified uses of the substance or mixture and uses advised against

Coloring material for building materials and use of creative hobbies

1.3Manufacturer information

STE DES OCRES DE France
Impasse des Ocriers
84400 – APT – France
www.ocresdefrance.fr

1.3 emergency number

www.centres-antipoison.net 01 40 05 48 48 (centre anti-poison)

Rubrique 2 : IDENTIFICATION OF RISKS

2.1 classification of the substance or mixture in accordance with Regulation (EC) No 1272/2008 and its adjustments.

This mixture is not classified as dangerous according to Directive 67/548 / EEC and its amendments.
For more details on health consequences and symptoms, see section 11.

2.2 labeling elements in accordance with Regulation (EC) No 1272/2008 and its adaptations.

No labeling element is required

2.3 Another dangers

The mixture does not meet the criteria for PBT or vPvB substances according to Annex XIII of REACH Regulation (CE) No 1907/2006

Rubrique 3: COMPOSITION / INFORMATION ON COMPONENTS

CI : Bk11
Composition : : Fe_3O_4
Substance/ préparation : preparation
Numéros cas : no
Numéros einecs : no

To the present knowledge of the supplier, this product does not contain any ingredients that are hazardous to require a statement in this section, in accordance with EU regulations or national regulations.
REACH: this preparation is not subject to REACH

Rubrique 4: FIRST AID

Transport the person to the fresh air. In case of fainting, place the person in a lateral safety position.
Immediately flush eyes with plenty of water, occasionally lifting the eyelids. Check if the victim wears contact lenses and in this case remove them.
If irritation occurs, consult a doctor.

Rubrique 5: FIRE FIGHTING MEASURES

The mixture is not flammable. In case of fire, spray with water (in fog), foam, dry chemical or carbon dioxide.

Rubrique 6: MEASURES TO BE TAKEN IN CASE OF ACCIDENTAL RELEASE

Provide adequate ventilation. Put on appropriate personal protective equipment.
Avoid dispersal and spillage of the spilled product and contact with soil, surrounding aquatic environment, sewers or drains.

Rubrique 7: HANDLING AND STORAGE

No special measures required

Rubrique 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Wash hands, forearms and face after handling product.
Recommended: dust mask
Avoid contact with eyes. Use eye protection in accordance with an approved standard
Personal protective equipment for the body should be selected according to the task to be performed and the risks involved.

Rubrique 9: PHYSICAL AND CHEMICAL PROPERTIES

general informations
Physical state: powder
Color : dark grey
Odor: odorless
Important health, safety and environmental information
PH:
Melting point: not available
Bulk density: 650 g / l
Solubility: insoluble

Rubrique 10: STABILITY AND REACTIVITY

The product is stable
Under normal conditions of storage and use, no hazardous decomposition products should appear.

Rubrique 11: TOXICOLOGICAL INFORMATION

Name of the product	Résult		Species	Dose	Exposure	Test
Ocre grise c *	DL50	*	Rat	>2000	-	-

* Test results on a similar product
Irritation / Corrosion
Skin: Non-irritating. Results of tests carried out on a similar product.
Eyes: Non-irritating. Results of tests carried out on a similar product.
If the product is handled properly, it has no harmful effects according to our experiences and information

Rubrique 12: ECOLOGICAL INFORMATION

No known significant effects or critical hazards.

Rubrique 13: CONSIDERATIONS RELATING TO ELIMINATION

In general: Check the suitability of the product for reuse. Uncleaned waste and uncleaned packaging must be packed or closed, labeled and disposed of at a destruction or recycling center in accordance with the national legislation in force. Consult the manufacturer in case of large quantities. If uncleaned empty containers are forwarded, inform the consignee of the possible risks due to the residues of the product. For disposal within the EU, use the waste code in force according to the European Waste List (LED). All waste producers are required, among other things, to classify their waste according to the category and process code of the European Waste List (LED).

To the present knowledge of the supplier, this product is not considered a hazardous waste as defined by EU Directive 91/689 / EEC

Rubrique 14: TRANSPORT

This product is not subject to labeling. No special conditions

Rubrique 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

- Classification and labeling information in section 2:
The following regulations have been taken into account:
- Règlement (CE) n° 1272/2008 modifié par le règlement (UE) n° 487/2013
- Règlement (CE) n° 1272/2008 modifié par le règlement (UE) n° 758/2013
- Règlement (CE) n° 1272/2008 modifié par le règlement (UE) n° 944/2013
- Règlement (CE) n° 1272/2008 modifié par le règlement (UE) n° 605/2014
- Règlement (CE) n° 1272/2008 modifié par le règlement (UE) n° 1297/2014
- Information about the packaging:
No data available.
- Particular dispositions :
No data available.

15.2. Chemical safety assessment

No data available.

Rubrique 16: ANOTHER INFORMATIONS

Abréviations :

ADR : Accord européen relatif au transport international de marchandises Dangereuses par la Route.
IMDG : International Maritime Dangerous Goods.
IATA : International Air Transport Association.
OACI : Organisation de l'Aviation Civile Internationale.
RID : Regulations concerning the International carriage of Dangerous goods by rail.
WGK : Wassergefahrdungsklasse (Water Hazard Class).
PBT : Persistante, bioaccumulable et toxique.
vPvB : Très persistante et très bioaccumulable.
SVHC : Substance of Very High Concern

Historical

Date of publication: may 2018
Date of the previous edition: July 2015

MATERIAL SAFETY DATA SHEET

ACCORDING TO DIRECTIVE 91/155/EEC

1. IDENTIFICATION OF THE SUBSTANCE, THE PREPARATION AND THE COMPANY

1.1	IDENTIFICATION OF THE SUBSTANCE	**NICOSIA GREEN EARTH**
1.2	IDENTIFICATION OF THE COMPANY	**STE OCRES DE FRANCE** **Impasse des Ocriers** **F - 84401 APT CEDEX** **Tél: 04.90.74.63.82 / FAX: 04. 90.74.46.75**
1.3	EMERGENCY PHONE NUMBER	Telephone : + 33 (0) 4.90.74.47.67 Telephone : + 33 (0) 4.90.74.63.82

2. COMPOSITION / INFORMATION OF THE COMPONENTS

2.	COMPOSITION	SI03 - MG23 - FE203 – CR203

3. IDENTIFICATION OF DANGERS

3.	SPECIFIC DANGERS :	None. Coloured loams are not classified within dangerous components but cannot be used in the pharmaceutical, cosmetics, food industry and subsidiaries sectors.

4. FIRST HELP

4.1.	CONTACT WITH EYES	Wash with water while spreading the eyelids In case of obstinate irritation, consult an oculist.
4.2.	CONTACT WITH SKIN	Wash with soapy water and rinse with water
4.3.	INHALATION	Move the person to open air. In case of sickness, consult a doctor
4.4.	INGESTION	In case of suspicions or recurrent symptoms call a doctor

5. BATTLE AGAINST FIRE MEASURES

	MEANS OF EXTINCTION :	
5.1.	Advisable :	none
5.2.	Counter indication:	none
5.3.	Specific dangers :	none
5.4.	Protection of the intervening parties :	none

6. MEASURES TO TAKE IN CASE OF ACCIDENTAL DISPERSION

6.1.	INDIVIDUAL PROTECTIONS :	Wear protective clothing
6.2.	PRECAUTIONS FOR THE PROTECTION OF THE ENVIRONMENT :	Avoid sewer dumping
6.3.	CLEANING INSTRUCTIONS:	None
6.4.	RECOVERY:	Vacuum Cleaning
6.5.	CLEANING:	Use soapy water

7. HANDLING AND STORAGE

7.1.	HANDLING	Handle avoiding dust emission.
7.2.	PRECAUTIONS	Capture of dusts at the emission source.
7.3.	STORAGE	Stable product in normal storage conditions.
7.4.	STORING ADVISE	Keep bags or buckets away from humidity.
7.5.	INCOMPATIBLE MATTERS	None to our knowledge
7.6.	MATERIAL PACKING	Paper bag or plastic bucket

8. EXPOSURE CONTROL / INDIVIDUAL PROTECTION

8.1.	RESPIRATORY PROTECTION	Wear a protecting mask against dusts
8.2.	HANDS PROTECTION	Wear suitable gloves
8.3.	EYES PROTECTION	Wear protective glasses
8.4.	SPECIFIC HYGIENE MEASURES	No food, no drinks, no smoking during use

9. CHEMICAL AND PHYSICAL PROPERTIES

9.1.	PHYSICAL STATE	Micro Granulate
9.2.	COLOR	Green
9.3.	ODOR	Odorless
9.4.	TEMPERATURE OF FUSION	> 1000 ° C
9.5.	PH VALUE	+/- 8-9

10. STABILITY AND REACTIVITY

10.1 STABILITY	Stable in normal storage conditions.
10.2 HARMFUL REACTIONS	None, in normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Toxicological testing with similar chemical products gave the following information:
DL 50 by oral testing, test on rat: > 5000mg / kg
Rabbit Skin (24H00): Non irritant. Rabbit eye: Non irritant
Under our actual knowledge the pigments manufactured by the company SOCIETE DES OCRES DE FRANCE are physiologically non harmful. Hence in case of eye contact and under the mechanical effect of powder there is a small risk of slight temporary irritation of the ocular mucous membrane and this in extreme situations.

12. ECOLOGICAL INFORMATION

Ecotoxicological studies on similar products have given the following results:
High toxicity on fishes : (Leuciscus Idus) CLO: 1000mg/liter
High toxicity on bacteria : No harmful outcome on pseudomonas putida : > 1000mg/liter
Due to the almost total water insolvability a separation occurs during all filtration or sedimentation process.

13. ELIMINATION CONNECTED CONSIDERATIONS

13.1. PROCEDURE OF NEUTRALIZATION AND DESTRUCTION OF THE PRODUCT
Eliminate in a controlled dump
13.2. PROCEDURE OF DESTRUCTION OF THE CONTAMINATED PACKING /
No reusable packing, to be eliminated in a controlled dump

14. RELATIVE INFORMATION TO THE TRANSPORTATION

14.1	GGVSee/IMDG CODE	---
14.2	GGVE/GGVS	---
14.3	UN No.	---
14.4	RID / ADR	---
14.5	ICAO / IATA-DGR	---
14.6	ADNR	---

INTERNATIONAL REGULATION : This product is not regulated. Sensible to humidity. Keep away from food, acids and its basis. Sensible to odors.

15. AUTHORIZED INFORMATION

This product is not submitted to labelling.
Iron (Fe203, smokes in Fe) : VME = 5 mg/m3 (France)
Dusts : VME = 5mg/m3 in alveolus dust and 10 mg/m3 in total dusts.
CMA Value : 6mg/m3 as alveolus sprayer.

16. OTHER INFORMATION

This safety card has been achieved in accordance with T01-102/12/92 guideline and 91/155/EG. The indicated information is based on the state of our knowledge of the concerned product. Information and recommendations contained in this form are only based on estimated data. Nevertheless it can be given no insurance or relative guarantee to the present information. **SOCIETE DES OCRES DE FRANCE. F - 84401 APT CEDEX**

Green Earth

FICHE DE DONNEES DE SECURITE

TERRE VERTE DE NICOSIE

SAFETY DATA SHEET

1- Commercial Product name: **TERRA VERDE NICOSIA (TR/0282)**

Distributor :

STE DES OCRES DE France
Impasse des Ocriers
84400 – APT – France

00.33 (0)490.746.382

2- Hazard identification

Not necessary.

3- Composition / Chemical characterization

Milled and purified natural green earth (Silicati e ossidi ferrosi e ferrici Al, Fe, Mg, K)

4- First aid maesures:

Inhalation:	If inhaled, move to fresh air
Eyes:	Flush eye with flowing water
Skin:	Wash affected skin with soap and water
Ingestion:	If swallowed, dilute with water and induce vomiting.

5- Fire fighting measures:

This product is not flammable, it doesn't produce toxic effect.
Unusual fire and explosion hazards : none

6-Accidental release measures:

Personal precautions:	clean up with the appropriate personal equipment
Environmental precautions:	The product is not dangerous for the nature

7 -Handling and storage:

A moderately dry, well-ventilated area is considered suitable for handling and storage.
Usual precautions for nuisance dust should be observed.
Steps to be taken in case material is released or spilled: clean up with wetting or material avoiding dusting.

8- Explosion control / personal protection:

Respiratory/ eye/ hand protection: not necessary
Respiratory protection is advisable in dusty place.
TLV-TWA = 10 mg/m3

9- Physical & chemical properties:

Appearance:	powder
Odour:	none
pH:	6-9
Solubility in water:	insoluble in water
Specific gravity:(H_2O=1)	ca. 0,800
Boiling /melting/flash point:	not applicable
Flammability/auto flammability:	none
Extinguishing media:	no restriction

Minerals: SiO_2 : 29,9%, Al_2O_3 6,7%, TIO_3 1,44 %, Fe_2O_3 12%, MgO 4,5%, CaO_3 20,8%, Na_2O 0,23%, MnO 0,09% K_2O 0,76% fire loss : 22,18%

10- Stability and reactivity:

Stability:	stable under normal conditions of storage and use
Hazardous reactions:	none

11- Toxicological information:

The product is not toxic

Acute oral toxicity: LD50 (rat) > 5 g /kg

12- Ecological information

Not dangerous for the nature

13- Disposal considerations:

Consult a local expert for advice on the disposal of the material.
Ensure that disposal is in compliance with local, national regulations.

14- Transport information:

no restrictions.

15- Regulatory information:

The product is not a substance subjected to mandatory marking with the EEC Directive 67/548/EEC. It is a natural product.

16- Other information

The information herein is based on the present state of our knowledge, but without liability.

Date: 16/02/11

SAFETY DATA SHEET

According to Chinese National Standard GB/T 16483-2008 and GB/T 17519-2013

Revision date: 12-Nov-2019

According to Chinese National Standards GB/T 16483-2008 and GB/T 17519-2013, a Safety Data Sheet (SDS) must be provided for hazardous substances or mixtures. This product does not meet the classification criteria according to this standard. Therefore, such document is outside the scope of the standard and the requirements for each section do not apply.

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name:	EMPEROR® 1800
Product code:	E1800
Synonyms:	Modified Carbon Black
Recommended use:	Colorant for industrial/automotive coatings
Restrictions on use:	Not Applicable
Supplier:	
Cabot China Ltd. 558 Shuangbai Road Shanghai 201108 CHINA Tel: +86 21 5175 8800 Fax: +86 21 6434 5532	Cabot Corporation Pampa Development & Manufacturing Center Rt. 1 Box 120 5 Miles West of Pampa/Hwy 60 Pampa, Texas 79065 UNITED STATES Tel: 1-806-661-3200 Fax: 1-806-661-3048
Emergency telephone	China: CHEMTREC 4001 - 204937 International CHEMTREC: +1 703-741-5970 or +1-703-527-3887 CHEMTREC US 1-800-424-9300 or +1-703-527-3887
E-mail address:	SDS@cabotcorp.com

2. HAZARDS IDENTIFICATION

GHS - Classification

Not a hazardous substance according to Chinese National Standards GB 13690-2009 and GB 30000.2-29-2013.

Label Elements:

Pictogram:	None
Signal Word:	None
Hazard statements:	None
Precautionary Statements:	None

Hazards not otherwise classified (HNOC)

This substance is classified as hazardous as a combustible dust by the United States 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Hazardous Products Regulation (HPR) 2015 The signal word, hazard statement and precautionary statements in the United States and Canada are: WARNING May form combustible dust concentrations in air. Keep away from all ignition sources including heat, sparks and flame. Prevent dust accumulations to minimize explosion hazard.

Do not expose to temperatures above 175°C. Hazardous products of combustion can include carbon monoxide, carbon dioxide, oxides of sulfur, and organic products.

Potential health effects

Principle Routes of Exposure:	Inhalation, Eye contact, Skin Contact
Eye Contact:	May cause irritation. Avoid eye contact.
Skin Contact:	May cause irritation. Avoid skin contact.
Inhalation:	Dust may be irritating to respiratory tract. Provide appropriate local exhaust ventilation at machinery and at places where dust can be generated. See also Section 8.
Ingestion:	Adverse health effects are not expected. See Section 11.
Carcinogenicity:	Does not contain any substances listed by IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), OSHA (Occupational Safety and Health Administration), ACGIH (American Conference of Governmental Industrial Hygienists) or EU (European Union). Carbon Black is listed as an IARC (International Agency for Research on Cancer) Group 2B substance (possibly carcinogenic to humans). See also Section 11.
Target Organ Effects:	Lungs, See Section 11
Medical Conditions Aggravated by Exposure:	Asthma, Respiratory disorder
Potential Environmental Effects:	Not expected to be harmful to the environment. However, product is dispersible in water and release to the environment should be avoided.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	weight-%
Carbon black, hydroxy- and 4-sulfophenyl-modified, sodium salt	481066-70-0	<100

Other Information:
The hyphen (-) means "not applicable"

4. FIRST AID MEASURES

FIRST AID MEASURES

Skin Contact	Wash thoroughly with soap and water. Seek medical attention if symptoms develop.
Eye contact	Flush eyes immediately with large amounts of water for 15 minutes. Seek medical attention if symptoms develop.
Inhalation	If cough, shortness of breath or other breathing problems occur, move to fresh air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.
Ingestion	Do not induce vomiting. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms:	The most important known symptoms and effects are described in Section 2 and/or in Section 11.

Indication of any immediate medical attention and special treatment needed

Note to physicians:	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:	Use foam, carbon dioxide (CO2), dry chemical or water spray. A fog is recommended if water is used.
Unsuitable Extinguishing Media:	DO NOT USE a solid water stream as it may scatter and spread fire. DO NOT USE high pressure media which could cause formation of a potentially explosible dust-air mixture.
Specific hazards arising from the chemical:	It may not be obvious that carbon black is burning unless the material is stirred and embers and/or sparks are apparent. Carbon black that has been on fire should be observed closely for at least 48 hours to ensure no smoldering material is present. Burning produces irritant fumes. Dispersible in water.
Hazardous combustion products:	Carbon monoxide (CO). Carbon dioxide (CO2). Sulphur oxides.
Protective equipment and precautions for firefighters:	Wear suitable protective equipment. In the event of fire, wear self-contained breathing apparatus. Wet carbon black produces very slippery walking surfaces.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions:	CAUTION: Wet carbon black produces slippery walking surfaces. Avoid dust formation. Ensure adequate ventilation. Use personal protective equipment. See also Section 8.

Environmental Precautions:

Environmental Precautions:	Contain spilled product on land, if possible. Dispersible in water. Any product that reaches water should be contained. Local authorities should be advised if spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment:	Prevent further leakage or spillage if safe to do so.

Methods for cleaning up: If the spilled material contains dust or has the potential to create dust, use explosion-proof vacuums and/or cleaning systems suitable for combustible dusts. Use of a vacuum with high efficiency particulate air (HEPA) filtration is recommended. Do not create a dust cloud by using a brush or compressed air. Dry sweeping is not recommended. Water spray will produce very slippery walking surfaces and will not result in satisfactory removal of carbon black contamination. Pick up and transfer to properly labelled containers. See Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Provide appropriate local exhaust ventilation at machinery and at places where dust can be generated. Do not create a dust cloud by using a brush or compressed air. Dust may form explosible mixture in air.

Take precautionary measures against static discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations. Fine dust is capable of penetrating electrical equipment and may cause electrical shorts. If hot work (welding, torch cutting, etc.) is required the immediate work area must be cleared of carbon black product and dust.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep at temperatures below 175°C. Keep in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Do not store together with strong oxidizing agents. Do not store together with volatile chemicals as they may be adsorbed onto product. Keep in properly labeled containers.

Carbon black is not classifiable as a Division 4.2 self-heating substance under the UN test criteria. However, the UN criteria for determining if a substance is self-heating is volume dependent, i.e., the auto-ignition temperature decreases with increasing volume. This classification may not be appropriate for large volume storage containers.

Before entering vessels and confined spaces containing carbon black, test for adequate oxygen, flammable gases and potential toxic air contaminants. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosible mixture if they are released in the atmosphere in sufficient concentrations.

Incompatible materials: Strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure guidelines: .

There are no exposure limits identified for this product. Exposure limits for carbon black are stated below. The table below is a summary. Please see the specific legislation for complete information.

Carbon Black, CAS RN 1333-86-4: Argentina: 3.5 mg/m^3, TWA
Australia: 3.0 mg/m^3, TWA inhalable
Belgium: 3.6 mg/m^3, TWA

Brasil: 3.5 mg/m³, TWA
Canada (Ontario): 3.0 mg/m³, TWA inhalable
China: 4.0 mg/m³, TWA; 8.0 mg/m³, STEL
Colombia: 3.0 mg/m³, TWA inhalable
Czech Republic: 2.0 mg/m³, TWA
Finland: 3.5 mg/m³, TWA; 7.0 mg/m³, STEL
France - INRS: 3.5 mg/m³, TWA/VME inhalable
Hong Kong: 3.5 mg/m³, TWA
Indonesia: 3.5 mg/m³, TWA/NABs
Ireland: 3.5 mg/m³, TWA; 7.0 mg/m³, STEL
Italy: 3.0 mg/m³, TWA inhalable
Japan SOH: 4.0 mg/m³, TWA; 1.0 mg/m³, TWA respirable
Korea: 3.5 mg/m³, TWA
Malaysia: 3.5 mg/m³, TWA
Netherlands - MAC: 3.5 mg/m³, TWA inhalable
Mexico: 3.5 mg/m³, TWA
Norway: 3.5 mg/m³, TWA
Spain: 3.5 mg/m³, TWA (VLA-ED)
Sweden: 3.0 mg/m³, TWA
United Kingdom - WEL: 3.5 mg/m³, TWA inhalable; 7.0 mg/m³, STEL inhalable
US ACGIH - TLV: 3.0 mg/m³, TWA inhalable
US OSHA - PEL: 3.5 mg/m³, TWA

NOTE:

(1) Unless otherwise indicated as "respirable" or "inhalable", the exposure limit represents a "total" value. The inhalable exposure limit has been demonstrated to be more restrictive than the total exposure limit, by a factor of approximately 3.
(2) In its facilities globally, Cabot Corporation manages to the US ACGIH TLV of 3.0 mg/m³ TWA inhalable.

AGW: Arbeitsplatzgrenzwert
INRS: Institut National de Recherche et de Securite (National Institute of Research and Security)
MAC: Maximaal Aanvaarde Concentraties (Maximum allowed concentration)
MHLW: Ministry of Health, Labor and Welfare
NABS: Nilai Ambang Batas (threshold limit value)
OEL: Occupational Exposure Limit
PEL: Permissible Exposure Limit
SOH: Society of Occupational Health
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value
TRGS: Technische Regeln für Gefahrstoffe (Technical Rule for Hazardous Materials)
TWA: Time Weighted Average
US ACGIH: United States American Conference of Governmental Industrial Hygienists
US OSHA: United States Occupational Safety and Health Administration
VME: Valeur Moyenne d'Exposition (Average Level of Exposure)
WEL: Workplace Exposure Limit
VLA-ED: Valor límite ambiental de exposicíon diaria (environmental value of daily exposure limit)

Engineering Controls: Ensure adequate ventilation to maintain exposures below occupational limits. Provide appropriate exhaust ventilation at machinery and at places where vapors and dust can be generated.

Personal protective equipment [PPE]

Respiratory Protection: An approved air-purifying respirator (APR) for particulates may be permissible where airborne concentrations are expected to exceed occupational exposure limits. Protection provided by air-purifying respirators is limited. Use a positive-pressure, air supplied respirator if there is any potential for uncontrolled release, exposure levels are

not known, or any circumstances where air-purifying respirators may not provide adequate protection. Use of respirators must include a complete respiratory protection program in accordance with national standards and current best practices.

The following agencies/organizations approve respirators and/or criteria for respirator programs:

US: NIOSH approval under 42 CFR 84 required. OSHA (29 CFR 1910.134). ANSI Z88.2-1992 (Respiratory Protection).

EU: CR592 Guidelines for the Selection and Use of Respiratory Protection.

Germany: DIN/EN 143 Respiratory Protective Devices for Dusty Materials.

UK: BS 4275 Recommendations for the Selection, Use and Maintenance of Respiratory Protective Equipment. HSE Guidance Note HS (G)53 Respiratory Protective Equipment.

Hand Protection: Wear protective gloves to prevent soiling of hands. Use protective barrier cream before handling the product. Wash hands and other exposed skin with mild soap and water.

Eye/face Protection: Wear eye/face protection. Wear safety glasses with side shields (or goggles).

Skin and Body Protection: Wear suitable protective clothing. Wash clothing daily. Work clothing should not be allowed out of the workplace.

Other: Handle in accordance with good industrial hygiene and safety practice. Emergency eyewash and safety shower should be located nearby.

Environmental exposure controls: In accordance with all local legislation and permit requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid	Odor:	None
Appearance:	Black powder or pellets	Odor threshold:	Not Applicable
Color:	Black		

Property	Values	**Remarks • Method**
pH:	6-9	
Melting point/freezing point:		Not Applicable
Boiling point / boiling range:		Not Applicable
Evaporation Rate:		Not Applicable
Vapor pressure:		Not Applicable
Vapor Density:		Not Applicable
Density:		No information available
Bulk Density:	416-480 kg/m^3	
Specific Gravity at 20°C:		No information available
Water solubility:	Insoluble but readily dispersible	
Solubility(ies):	Insoluble	
Partition Coefficient (n-octanol/water):		Not Applicable
Decomposition temperature:		Not Applicable

Viscosity:		Not Applicable
Kinematic viscosity:		Not Applicable
Dynamic viscosity:		Not Applicable
Oxidizing Properties:		Not Applicable
Softening point:		Not Applicable
VOC content (%):		No information available
% Volatile (by Volume):		No information available
% Volatile (by Weight):	> 8%	No information available
Surface Tension:		No information available
Explosive properties:		Dust may form explosible mixture in air
Flash Point:		Not Applicable
Flammability (solid, gas):		No information available
Flammability Limit in Air:		No information available
Explosion Limits in Air - Upper (g/m^3):		No information available
Explosion Limits in Air - Lower (g/m^3):	60-70 g/m^3	
Autoignition Temperature:		No information available
Minimum Ignition Temperature:	520-540 °C	(BAM Furnace) VDI 2263
Minimum Ignition Energy:	> 500 mJ	VDI 2263
Ignition Energy:		No information available
Maximum Absolute Explosion Pressure:	7.7 bar	VDI 2263
Maximum Rate of Pressure Rise:	326 bar/sec	VDI 2263
Burn Velocity:		No information available
Kst Value:	88 bar.meter/second	VDI 2263
Dust Explosion Classification:	ST1	

10. STABILITY AND REACTIVITY

Reactivity: May react exothermically upon contact with strong oxidizers.

Stability: Stable under recommended handling and storage conditions.

Explosion data: See also Section 9.

Sensitivity to Mechanical Impact: Not sensitive to mechanical impact.

Sensitivity to Static Discharge: Dust may form explosible mixture in air. Avoid dust formation. Do not create a dust cloud by using a brush or compressed air. Take precautionary measures against static discharges. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations.

Possibility of hazardous reactions: None under normal processing.

Hazardous polymerization: Hazardous polymerization does not occur.

Conditions to avoid: Do not expose to temperatures above 175°C. Keep away from heat and sources of ignition. Avoid dust formation.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Carbon monoxide (CO). Carbon dioxide (CO2). Sulfur oxides. Organic products of combustion.

11. TOXICOLOGICAL INFORMATION

Information given is based on data on the components and the toxicology of similar products.

Acute toxicity

Oral LD50:	LD50/oral/rat = > 5000 mg/kg.
Inhalation LC50:	Due to the product's physical characteristics, no suitable testing procedure is available
Dermal LD50:	LD50/dermal/rabbit = >2000 mg/kg.
Skin corrosion/irritation:	Primary irritation index = 0.25/8 Slight irritation
Serious eye damage/eye irritation:	Rabbit. Draize score 7.0/110 (1 hr). Non-irritating.
Sensitization:	A delayed contact hypersensitivity study in guinea pigs utilizing the Magnusson and Kligman Maximization technique was performed. Did not cause sensitization on laboratory animals.
Germ Cell Mutagenicity	Not mutagenic in Ames test, Negative in the chromosome aberration test in Chinese hamster ovary (CHO) cells
Carcinogenicity:	Product not tested. Information below pertains to the raw material (carbon black).

ANIMAL TOXICITY:

Rat, oral, duration 2 years.
Effect: no tumors.

Mouse, oral, duration 2 years.
Effect: no tumors.

Mouse, dermal, duration 18 months.
Effect: no skin tumors.

Rat, inhalation, duration 2 years.
Target organ: lungs.
Effect: inflammation, fibrosis, tumors.

Note: Tumors in the rat lung are considered to be related to the "lung overload" rather than to a specific chemical effect of carbon black itself in the lung. These effects in rats have been reported in many studies on other poorly soluble inorganic particles and appear to be rat specific (ILSI, 2000). Tumors have not been observed in other species (i.e., mouse and hamster) for carbon black or other poorly soluble particles under similar circumstances and study conditions.

MORTALITY STUDIES (HUMAN DATA):

A study on carbon black production workers in the UK (Sorahan, 2001) found an

increased risk of lung cancer in two of the five plants studied; however, the increase was not related to the dose of carbon black. Thus, the authors did not consider the increased risk in lung cancer to be due to carbon black exposure. A German study of carbon black workers at one plant (Morfeld, 2006; Buechte, 2006) found a similar increase in lung cancer risk but, like the Sorahan, 2001 (UK study), found no association with carbon black exposure. A large US study of 18 plants showed a reduction in lung cancer risk in carbon black production workers (Dell, 2006). Based upon these studies, the February 2006 Working Group at the International Agency for Research on Cancer (IARC) concluded that the human evidence for carcinogenicity was inadequate (IARC, 2010).

Since the IARC evaluation of carbon black, Sorahan and Harrington (2007) have re-analyzed the UK study data using an alternative exposure hypothesis and found a positive association with carbon black exposure in two of the five plants. The same exposure hypothesis was applied by Morfeld and McCunney (2009) to the German cohort; in contrast, they found no association between carbon black exposure and lung cancer risk and, thus, no support for the alternative exposure hypothesis used by Sorahan and Harrington.

Overall, as a result of these detailed investigations, no causative link between carbon black exposure and cancer risk in humans has been demonstrated.

IARC CANCER CLASSIFICATION:

In 2006 IARC re-affirmed its 1995 finding that there is "inadequate evidence" from human health studies to assess whether carbon black causes cancer in humans. IARC concluded that there is "sufficient evidence" in experimental animal studies for the carcinogenicity of carbon black. IARC's overall evaluation is that carbon black is "possibly carcinogenic to humans (Group 2B)". This conclusion was based on IARC's guidelines, which generally require such a classification if one species exhibits carcinogenicity in two or more animal studies (IARC, 2010).

Solvent extracts of carbon black were used in one study of rats in which skin tumors were found after dermal application and several studies of mice in which sarcomas were found following subcutaneous injection. IARC concluded that there was "sufficient evidence" that carbon black extracts can cause cancer in animals (Group 2B).

ACGIH CANCER CLASSIFICATION:

Confirmed Animal Carcinogen with Unknown Relevance to Humans (Category A3 Carcinogen).

ASSESSMENT:

Applying the guidelines of self-classification under the Globally Harmonized System of Classification and Labeling of Chemicals, carbon black is not classified as a carcinogen. Lung tumors are induced in rats as a result of repeated exposure to inert, poorly soluble particles like carbon black and other poorly soluble particles. Rat tumors are a result of a secondary non-genotoxic mechanism associated with the phenomenon of lung overload. This is a species-specific mechanism that has questionable relevance for classification in humans. In support of this opinion, the CLP Guidance for Specific Target Organ Toxicity – Repeated Exposure (STOT-RE), cites lung overload under mechanisms not relevant to humans. Human health studies show that exposure to carbon black does not increase the risk of carcinogenicity.

Reproductive and Developmental Toxicity:

Product not tested. Information below pertains to the raw material (carbon black).

ASSESSMENT: No effects on reproductive organs or fetal development have been reported in long-term repeated dose toxicity studies in animals.

STOT - single exposure:

Product not tested. Information below pertains to the raw material (carbon black).

ASSESSMENT: Based on available data, specific target organ toxicity is not expected after single oral, single inhalation, or single dermal exposure.

STOT - repeated exposure:

Product not tested. Information below pertains to the raw material (carbon black).

ANIMAL TOXICITY:

Repeated dose toxicity: inhalation (rat), 90 days, No Observed Adverse Effect Concentration (NOAEC) = 1.1 mg/m^3 (respirable). Target organ effects at higher doses are lung inflammation, hyperplasia, and fibrosis.

Repeated dose toxicity: oral (mouse), 2 yrs, No Observed Effect Level (NOEL) = 137 mg/kg (body wt.)

Repeated dose toxicity: oral (rat), 2 yrs, NOEL = 52 mg/kg (body wt.)

Although carbon black produces pulmonary irritation, cellular proliferation, fibrosis, and lung tumors in the rat under conditions of "lung overload", there is evidence to demonstrate that this response is principally a species-specific response that is not relevant to humans.

MORBIDITY STUDIES (human data):

Results of epidemiological studies of carbon black production workers suggest that cumulative exposure to carbon black may result in small, non-clinical decrements in lung function. A U.S. respiratory morbidity study suggested a 27 ml decline in FEV1 from a 1 mg/m^3 8 hour TWA daily (inhalable fraction) exposure over a 40-year period (Harber, 2003). An earlier European investigation suggested that exposure to 1 mg/m^3 (inhalable fraction) of carbon black over a 40-year working lifetime would result in a 48 ml decline in FEV1 (Gardiner, 2001). However, the estimates from both studies were only of borderline statistical significance. Normal age-related decline over a similar period of time would be approximately 1200 ml.

In the U.S. study, 9% of the highest non-smokers exposure group (in contrast to 5% of the unexposed group) reported symptoms consistent with chronic bronchitis. In the European study, methodological limitations in the administration of the questionnaire limit the conclusions that can be drawn about reported symptoms. This study, however, indicated a link between carbon black and small opacities on chest films, with negligible effects on lung function.

INHALATION ASSESSMENT:

Applying the guidelines of self-classification under GHS, carbon black is not classified under STOT-RE for effects on the lung. Classification is not warranted on the basis of the unique response of rats resulting from the “lung overload” following exposure to poorly

soluble particles such as carbon black. The pattern of pulmonary effects in the rat, such as inflammation and fibrotic responses, are not observed in other rodent species, non-human primates, or humans under similar exposure conditions. Lung overload does not appear to be relevant for human health. Overall, the epidemiological evidence from well-conducted investigations has shown no causative link between carbon black exposure and the risk of non-malignant respiratory disease in humans. A STOT-RE classification for carbon black after repeated inhalation exposure is not warranted.

ORAL ASSESSMENT:

Based on available data, specific target organ toxicity is not expected after repeated oral exposure.

DERMAL ASSESSMENT:

Based on available data and the chemical-physical properties (insolubility, low absorption potential), specific target organ toxicity is not expected after repeated dermal exposure.

Aspiration Hazard: Product not tested. Information below pertains to the raw material (carbon black).

ASSESSMENT: Based on industrial experience and the available data, no aspiration hazard is expected.

12. ECOLOGICAL INFORMATION

Information given is based on data on the components and the toxicology of similar products.

Aquatic Toxicity:
Fish LC50 (96 hours): > 100 mg/l
Daphnia magna EC50 (48 hours): > 1000 mg/l
Algae EC50 (72 hours, growth inhibition): > 100 mg/l
Activated Sludge EC50 (respiration inhibition): > 1000 mg/l

ENVIRONMENTAL FATE

Persistence and degradability: Not expected due to physicochemical properties of the substance.

Bioaccumulation: Log Pow <0.3. Not expected due to physicochemical properties of the substance.

Mobility: Not soluble in water, but highly dispersible.

Distribution to Environmental Compartments: Dispersible.

PBT and vPvB Assessment: This substance does not fulfill the criteria for PBT or vPvB.

Other adverse effects: No information available.

13. DISPOSAL CONSIDERATIONS

Disclaimer: Information in this section pertains to the product as shipped in its intended composition as described in Section 3 of this SDS. Contamination or processing may change waste characteristics and requirements. Regulations may also apply to empty containers, liners or rinsate. State/provincial and local regulations may be different from federal regulations.

Disposal considerations:	Waste should not be released to sewers. Product, as supplied, can be burned in suitable incineration facilities or should be disposed of in accordance with the regulations issued by the appropriate federal, state and local authorities. Same consideration should be given to containers and packaging. When selecting a disposal alternative, landfill is not recommended due to the water dispersible characteristics of this material. Reuse is not recommended.

14. TRANSPORT INFORMATION

Seven (7) ASTM reference carbon blacks were tested according to the UN method, Self Heating Solids, and found to be "Not a self-heating substance of Division 4.2"; the same carbon blacks were tested according to the UN method, Readily Combustible Solids, and found to be "Not a readily combustible solid of Division 4.1"; under current UN Recommendations on the Transport of Dangerous Goods.

The following organizations do not classify carbon black as a "hazardous cargo" if it is "carbon, non-activated, mineral origin". Cabot carbon blacks meet this definition.

DOT

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

ICAO (air)

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

IATA

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

IMDG

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

RID

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

ADR

UN/ID no	Not regulated
Proper Shipping Name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated

15. REGULATORY INFORMATION

Hazardous Chemical Inventory: Not Listed

International Inventories

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory	Complies
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List	Complies
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances	Complies
ENCS - Japan Existing and New Chemical Substances	Complies
IECSC - China Inventory of Existing Chemical Substances	Complies
KECL - Korean Existing and Evaluated Chemical Substances	Complies
PICCS - Philippines Inventory of Chemicals and Chemical Substances	Complies
AICS - Australian Inventory of Chemical Substances	Complies
NZIoC - New Zealand Inventory of Chemicals	Complies
TCSI - Taiwan Chemical Substance Inventory	Complies

Note: US TSCA Inventory Active/Inactive Status: All non-exempt components in this product are designated as Active.

16. OTHER INFORMATION

Carbon Black Extracts:
Manufactured carbon blacks generally contain less than 0.1% of solvent extractable polycyclic aromatic hydrocarbons (PAH). Solvent extractable PAH content depends on numerous factors including, but not limited to, the manufacturing process, desired product specifications, and the analytical procedure used to measure and identify solvent extractable materials. Questions concerning PAH content of carbon black and analytical procedures should be addressed to your carbon black supplier

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Process Safety Test Results and Interpretation (explosivity, etc.), Chilworth Technology Inc., Study No. R/8087/0808/SS, 14 August 2008

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Sorahan T, Hamilton L, van Tongeren M, Gardiner K, Harrington JM (2001). A cohort mortality study of U.K. carbon black workers, 1951-1996. Am. J. Ind. Med. 39(2):158-170.

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Prepared by:	Cabot Corporation - Safety, Health and Environmental Affairs
Revision date:	12-Nov-2019
Previous Revision Date:	11/May/2017

End of Safety Data Sheet

L. CORNELISSEN & SON

Artists' Colourmen

Suppliers of Materials for Painters, Gilders & Printmakers

Safety Data Sheet according to Directive 91/155/EC

Revision Date: October 2013

1) Identification of the substance/preparation and the company

Trade Name: Cornelissen Lemon Yellow

Application: Artists' Pigment

Manufacturer/Supplier:

L Cornelissen & Son Ltd
105 Great Russell Street
London WC1B 3RY

Tel: 020 7636 1045
Fax: 020 7636 3655

www.cornelissen.com

Composition/Information on ingredients

Chemical composition: Barium chromate, Substance mono-constituent $BaCrO_4$.

CAS N°: 10294-40-3 EINECS N°: 233-660-5
Pigment: Yellow 31 Colour Index: 77103

Impurity, hazardous components (1) regulation 1272/2008

CAS N°	Annex VI Index N°	EINECS N°	Name	%	Symbol	Phrase
Substance						
10294-40-3	056-002-00-7	233-660-5	$BaCrO_4$ Barium chromate	95	GHS07 Warning	H332 H302
Impurities:						
7789-06-2	024-009-00-4	232-142-6	$SrCrO_4$ Strontium chromate	0.5	GHS08 GHS07 GHS09 Danger	H350 H302 H400 H410
11103-86-9	024-007-00-3	234-329-8	Zinc Potassium Chromate $3ZnCrO_4$, K_2CrO_4 $Zn(OH)_2$, $2H_2O$	0.5	GHS08 GHS07 GHS09 Danger	H350 H302 H317 H400 H410

3) Hazards Identification

Classification

Classification according to Regulation (EC) No 1272/2008

Hazard pictogram:

Signal word: DANGER

Hazard statements:

	H350	May cause cancer.
	H302	Harmful if swallowed.
	H332	Harmful if inhaled.
	H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

Prevention:	P202	Do not handle until all safety precautions have been read and understood.
Response:	P264	Wash thoroughly after handling.
	P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
	P308 P313	If exposed or concerned: get medical advice/attention.
	P405	Store locked up.
Disposal:	P501	Dispose of contents/ containers to be collected by a licensed contractor in accordance with national and local regulations.

4) First Aid Measures

Description of first aid measures: Get immediate medical attention.

After inhaling:	Immediately remove from exposure area to fresh air. If respiration has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively.
After skin contact:	Immediately remove contaminated clothing and shoes. Wash contaminated area with soap or mild detergent and large amount of water until no evidence of chemicals remains. Lesions can be scrubbed with a 20 % solution of sodium hyposulfite or treated

with calcium-disodium EDTA ointments. Freshly prepared and promptly applied 10 % ascorbic acid solution may speed healing of ulcers (Gosselin Clinical Toxicology of Commercial Products, 5th Ed). As will 1 % solution of aluminium acetate (Arena, Poisoning 4th Ed.)

After eye contact: Wash eyes immediately with large amounts of water, occasionally lifting upper and lower lids, until no evidence of chemical remains (at least 15-20 minutes). Continue irrigating with normal saline until pH has returned to normal (30-60 minutes) cover with sterile bandages. Get immediately ophthalmologist attention.

After ingestion: If the person is conscious and not convulsing, induce vomiting by giving syrup of ipecac (keeping the head below the hips to prevent aspiration), followed by water. Repeat in 20 minutes if not effective initially. For patients with depressed respiration or if vomiting has not worked out, perform gastric lavage cautiously (Dreisbach, Handbook of Poisoning, 12th Ed.). Treat symptomatically and supportively. Gastric lavage should be performed by qualified medical personnel. Get immediately medical attention.

Indication of any immediate medical attention and special treatment needed: NOTE TO PHYSICIAN

ANTIDOTE: The following antidote has been recommended. However, the decision as to whether the severity of poisoning requires administration of any antidote and actual dose required should be made by qualified medical personnel.

BARIUM POISONING: Give orally 30 gr of Sodium Sulphate in 250 ml of water and repeat one hour later (with the help of a pipe if necessary). The administration of sulphate salts intravenously is hazardous, since they induce the precipitation of barium sulphate in the kidney, with subsequent renal failure. Administration of potassium is critical (Dreisbach, Handbook of Poisoning, 12th Ed.). Antidote should be administered by qualified medical personnel.

CHROMIUM POISONING: use of dimercaprol has been suggested on the basis of findings on animals. Give 3 mg/kg (or 0.3 ml/10 kg) every 4 hours, intramuscularly for the first 2 days and then 2 mg/kg every 12 hours for a total of 10 days (Dreisbach Handbook of Poisoning, 12th Ed.). Antidote should be administered by qualified medical personnel.

5) Fire Fighting Measures

Suitable extinguishing media: CO_2, dry chemical, regular foam.

Not recommended: Water spray (chromate slightly soluble in water). Do not let this material and its solution contaminate the Environment.

Special hazards arising from the substance: Negligible hazard when exposed to flames. When heated this substance decomposes and can release oxygen (temperature range 200-600 ° C Depends on reducing conditions).

When there is excess heat, after reduction of barium chromate salts of trivalent chromium, there is conversion to CrO_3 under oxidizing conditions. In large fires, the

decomposition of substances may release oxides of chromium. Keep away from reducing agents (e.g. hydrazine, wood, sulphur, paper, aluminium). Avoid breathing dust.

Advice for fire-fighters

Special personal protection equipment: Wear an air respirator beyond dust limits, gloves and appropriate clothing and equipment to prevent a prolonged skin contact with substance.

Conduct of fire fighting: Avoid dusting. Keep away unprotected people. Move container from fire area; if possible you can do it without risk. Do not scatter spilled material with high-pressure water streams. Dike and contain fire-control water for later disposal. (chromate practically insoluble in water). Eliminate waste waters according to local regulations: see chapter 6. Contaminated wastes have to be collected by a licensed contractor. Do not let contaminated water contaminate the environment.

Additional information: The fire water, waste contaminated containers and fire residues containing barium chromate must be removed by licensed contractor for garbage.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Avoid dusting. Wear appropriate mask (minimum type FFP2 (EN 149)), glasses and gloves and appropriate clothing equipment to prevent from a prolonged skin contact with this substance. Keep unnecessary people away.

Environmental precautions: Prevent the formation of a cloud of dust and atmospheric emission of barium chromate may fall to the ground and pollute it. Do not get rid of waste waters, neither in discharge, nor in sewers, but according to local regulations. To prevent dispersion on the floor and later in the environment, it is highly recommended to forbid walking on the product spillage. Avoid/minimise residues and waste production as possible.

Methods and material for containment and cleaning up:

Occupational spill: Avoid dusting. Sweep up in suitable clean, dry container or absorb material avoiding dusting.

Do not flush spilled materials into sewer. Keep unnecessary people away.

Soil spill: Dig a holding area such as pit, pond or lagoon to contain spilled material. Use protective cover such as plastic sheet to prevent dissolving in fire-fighting water or rain. Dusting is prohibited.

Water spill: For total elimination. Detoxication of Cr6+ is recommended (Cr6+ in waste water is prohibited according to local regulations). For this purpose add $FeSO_4$ for the chromium reduction and then proceed to Cr3+ flocculation by neutralisation (pH 8-9) with sodium carbonate, lime. Use mechanical dredges or lifts to extract immobilised masses of pollution and precipitates.

Air spill: A hazardous concentration of particles in suspension in the air can quickly be reached by dispersion. Keep unnecessary and unprotected people away. Let the particles suspension fall down and go into the place with appropriate individual protection equipment: respirator (or dust mask) and protective (impervious) clothing. Prevent any contact with food and animal feeding stuff.

7) Handling and Storage

Precautions for safe handling:

EC: The directive 90/394/EC dealing with the prevention of exposition risks to carcinogenic agents in workhouses applies to this substance (see Chapter 15). The directives 98/24/EC deals with the workers' health and security protection against chemical risks in workhouses.

Handling: Avoid dust breathing and use adequate ventilation. Protection is required to keep exposure below permissible limit (see Chapter 8 and 15). Refer to Chapter 8 to know the protection means you have to wear.

Protection against fire and explosion: The product is non-flammable. It may reduce the ignition temperature of flammable substances. Prevent static electric sparks.

Conditions for safe storage, including any incompatibilities:

Storage: Store in roofed place at room temperature. Keep containers tightly sealed. Do not store with or close to food and animals feeding stuff (see Chapter 15).

Material/chemical incompatibility: Do not store close to reducers (ex-hydrazine, aluminium powder).

8) Exposure/Personal Protection

Additional notes for design of plant equipment: no further detail. See chapter 7.

Substance with workplace related limits to be monitored:

$BaCrO_4$, Barium Chromate (95%) CAS: 10294-40-3

$SrCrO_4$, Strontium Chromate (0.5%) CAS: 7789-06-2

$3ZnCrO_4$, K_2CrO_4, $Zn(OH)_2$, $2H_2O$, zinc potassium chromate (0.5%) CAS: 11103-86-9

EXPOSITION LIMIT VALUE (Occupational Exposure Limits):

European Union Chromium VI compounds 0.05 mg Cr/m3

Denmark Chromates 0.005 mg Cr/m3

France Chromium VI compounds 0.05 mg Cr/m3

Germany Chromium VI compounds 0.05 mg Cr/m3

Barium chromate is insoluble.

Due to the possible impurities it contains, we classify it as: Carc. Cat.1A.

Japan Chromium VI compounds 0.05 mg Cr/m3

South Africa Chromium VI compounds 0.05 mg Cr/m3

Sweden Chromates VI 0.02 mg Cr/m3

UK Chromium VI compounds (MEL) 0.05 mg Cr/m3 (Maximum Exposure Limit)

USA Threshold Limit Value (TLV - ACGIH) 0.01 mg Cr /m3 (TWA) (TWA: 8 hours Time Weighted Average). (Note: this value is considered as a ceiling value: peaks should not be exceeded for any period of time).

Cancer Class: Given the fact barium chromate is insoluble and that it may contain soluble hexavalent chromium compounds from zinc potassium chromate or strontium we classify it: Category 1A (CLP-GHS proved human carcinogen).

Professional exposure.

This substance can be associated with the alkaline chromate's family for which biological exposure indices exist. These indices are a mean to assess the workers' exposure to chemical substances and can be complementary to the measurements of exposition threshold values in the air (table below).

CrO3concentration in the air without protection (µg/m3)	Chromium content in erythrocytes (µl/l blood)	Chromium in urine (µg/l)
0.03	9	12
0.05	17	20
0.08	25	30
0.1	35	40

A direct relationship exists between the exposure on a workhouse of compounds belonging to the alkaline chromate's family and the chromium concentration in blood and urine. Results of such analyses allow assessing workers' health (table above).

OCCUPATIONAL EXPOSURE MANAGEMENT:

CrVI+ Risk management minimizing needs an 8 hours time weighted average exposure below the Threshold Limit Value in occupational workplaces. In order to perform a real exposure on workplace, it is recommended to:

- Keep under control CrVI+ nuisance dust exposure
- Determine the accurate working time per shift
- Choose appropriate Personal protective equipment (Respiratory Protective device…) with accurate safety factor

After calculation, risk characterisation ratio must be below than 1 for safe operating conditions. For more information see extended safety data sheet.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection: Wear a specific respirator or dust mask (at least a type FFP3) adapted to contamination level found on site.

Hand protection: Employee must wear appropriate protective gloves to prevent from contact with this substance.

Eye protection: Employee must wear splash-proof or dust-resistant safety goggles and a face shield to prevent from contact with this substance (EN166).

Clothing: Employee must wear appropriate protective (impervious) clothing and equipment to prevent from any possibility of skin contact with this substance.

Skin protection: Wear appropriate clothing to avoid any contact with skin.

Other recommendations: Showering is recommended after work according to local regulations. Do not drink and eat on site.

Avoid any dust generation. No data are available as to the environment exposure. However, emissions have to conform to the authorised limits (see Chapter 15).

Given the lack of data, this compound is considered as trivalent chromium in soils. Little quantities of hexavalent chromium are quickly converted into trivalent chromium in the soil.

Atmospheric emissions: Ventilation systems must be appropriated to get the performance level to control air emissions as required by national regulations. If necessary an appropriate treatment device must be installed according to regulations (Cr6+ compound)

Water emissions: Must be keep under control so they do not contaminated water drainage systems, sewers, streams surface water and groundwater as required by national regulations

Soil emissions: Do not let this material to contaminate soils or ground.

9) Physical and chemical Properties

Physical state:	solid
Odour and appearance:	odourless yellow powder
Change in physical state	
Decomposition Melting	500° C - 600° C * (air) > 1900° C

* Temperature may be reduced by reducers

Flash-point:	NA
Flammable properties:	not flammable, may enhance flammability of other materials
Explosion risks:	NA
Vapour pressure:	NA
Specific gravity:	4.5 ISO 787/10
Solubility (water 20° C):	3-10 mg/l ISO 2068
pH:	6 - 9 ISO 787/9
Other information:	Practically insoluble in water.
	Soluble in mineral acids, insoluble in dilute acetic acid.
	Slightly soluble in ammonia salts.
Coef. n Octanol/water:	not available

10) Stability and Reactivity

Reactivity: Barium Chromates are very slightly soluble in water (0.1g/l). When heated this substance is decomposed and may release oxygen (temperature range 200-600°C depending of reducing condition). However, in similarity with strontium chromate, according GHS/CLP 1272/2008/EC regulation, the barium chromate should not be considered to be an oxidising solid (oxidizer not strong enough to be classified).

Chemical stability: Stable under normal temperatures and pressures. When mixed with acid this substance may generate dichromate (pH: 5.5-3.5)/ chromic acid (pH <3) in mixture.

Possibility of hazardous reactions: Stable under normal condition of uses. When excess of heating, after reduction of the Barium chromate in trivalent chromium salts, these are converted in CrO3 in oxidising conditions. In case of large fire, substance decomposition may release some oxides of chromium.

Conditions to avoid: Flammability. This product may burn, but does not ignite readily. Prevent static electric sparks.

Incompatible materials: Avoid contact with strong reducers (Al, hydrazine, combustible materials), excessive heat, sparks or open flame.

Hazardous decomposition products: Stable under normal temperatures and pressures. At high temperature, may release Cr6+. After reduction of the barium chromate in trivalent chromium salts, these are converted in CrO3 in oxidising conditions.

11) Toxicological Information

Toxicity data: LD/LC50 oral (rat): not available.

Chronical toxicity: Barium Chromate pigments are practically insoluble. However, gastric fluid dissolves small quantities of Barium Chromate which is harmful (soluble Ba HCl 0.07 N: 2.2 % maximum) if swallowed. Absorption of barium may result in potassium deficiency.

Carcinogenicity: The barium chromate is recognized without effect on the animal: however, we classify under 2 GHS Carcinogen IARC Group 1A as hexavalent chromium compound contained in potential impurities (zinc chromate or strontium potassium).

Substance listed as "known human carcinogen" or "anticipated human carcinogen" by the National Toxicology Program (NTP) annual report on Carcinogen (USA).

Mutagenicity, Reproductive toxicity:

Mutagenicity: No data available

Reproductive toxicity: No data available

Irritation: Contact with skin: may cause irritation by mechanical contact. By similarity to strontium chromate, this substance should not present the characters enough to be classified according to the CLP Regulation 1272/2008/EC.

Contact with eyes may cause irritation by mechanical contact. By similarity to strontium chromate, this substance should not present the characters enough to be classified according to the CLP Regulation 1272/2008/EC.

Sensitization: No sensitizing effects known for barium chromate

Repeated dose toxicity:

Toxicity specific target organ (single exposure): No information available.

Toxicity specific target organ (repeated exposure): No information available.

Aspiration hazard: No information available.

12) Ecological Information

Aquatic toxicity, Chronic aquatic toxicity: Harmful for the aquatic organisms and may cause long term adverse effects in the aquatic environment, due to traces of strontium chromate or zinc potassium.

Sediment toxicity: No data available

Mobility: Substance slightly soluble in water (Cr6+) See chapter 6. No specific data available for barium chromate. This substance may be separated from water by sedimentation or filtration.

Disposal: It is recommended to proceed to a chemical flocculation by neutralisation at pH = 8.

Persistence/Degradability: This product containing CrVI while dumping is avoided. Hexavalent chromium may remain unchanged or change slowly in many natural waters at low concentrations of organic compounds / reducer. The oxidizing capacity of hexavalent chromium in water increases with decreasing pH (lower). Most chromium released into the water is finally deposited in sediments in hydrated form after being reduced to Cr (III). Cr6 + must be reduced for disposal. Chapters 6 and 9. Preventing it from entering the drainage of waste water or soil.

Behaviour in environmental compartments:

> Bio accumulative potential: The passage and bioaccumulation of chromium from the earth to the upper parts of plants above the ground is unlikely. Chromium is commonly found in freshwater organisms and accumulates in moderation.
>
> Mobility in soil: This product is very poorly soluble (but slightly stronger than that of barium sulphate) and consequently mobility is very low. However in the presence of sulphate-rich soils Barium chromate is likely to decompose to form insoluble barium sulphate and release CrVI+ in the environment. Chromium VI is extensively converted to trivalent chromium in soils and sediments (favoured by anaerobic conditions and low pH). In sediment and soil, chromium III is adsorbed more than the chromium VI.

Results of PBT and vPvB assessment: The Annex XIII of the REACH Regulation No. 1907/2006 is not applicable to inorganic substances.

13) Disposal Information

Waste treatment methods

Product: Do not let contaminate the environment with this substance. Waste and spillage must be collected by a licensed contractor for treatment. Dispose in accordance with state or local regulations.

Contaminated package and containers: Empty bags can be either destroyed, or recycled according to the international norms that apply. Spoiled and unclean packagings are regulated by the ADR/IMDG/IATA.

This substance meets the definition of the hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

14) Transport Information

ADR : UN 1564, BARIUM COMPOUND, N.O.S. (BARIUM CHROMATE), 6.1, III

IMDG : UN 1564, BARIUM COMPOUND, N.O.S. (BARIUM CHROMATE), 6.1, III

IATA: UN 1564, Barium compound, n.o.s. (Barium chromate), 6.1, III

Limited Quantities: Y645 net weight of the package: 10 kg max; 670; passenger aircraft 100 kg max; 677CAO 200 kg maximum.

15) Regulatory Information

Labelling according to Regulation 1272/2008/EC [CLP/GHS]

Hazard pictogram:

Signal word: DANGER

Hazard statements:

H350	May cause cancer
H302	Harmful if swallowed
H332	Harmful if inhaled.
H412	Harmful to aquatic life with long lasting effects

Precautionary statements:

Prevention:

P202	Do not handle until all safety precautions have been read and understood.

Response:

P264	Wash thoroughly after handling.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P308 P313	If exposed or concerned: get medical advice/attention.
P405	Store locked up.

Disposal:

P501	Dispose of contents/ containers to be collected by a licensed contractor in accordance with national and local regulations.

Chemical safety assessment: Chemical safety report were performed for all impurities included in Barium chromate

(see chapter 16) but not for the substance barium chromate.

16) Other information

EC PREPARATION LABELLING: (Directive 1999/45/EC)

If the concentration of this substance exceeds 10%, the preparation is labelled «carcinogen» and sentences R45 and/or R49 are mandatory depending on the case.

For industrial use only (97/10/EC).

GERMANY : Wassergefäfrdungsklasse WGK (VwVwS): WGK 3

USA:

- Substance included in the EPA TSCA inventory.

- RTECS number: CQ 8760000 (Register of Toxical Effects of Chemical Substances).

- Cercla Rating (scale 0-3): Health 3 - Fire 0 - Reactivity 0 - Persistence 3.

- NFPA Rating (scale 0-4): Health 4 - Fire 0 - Reactivity 0.

- Substance labelled and classified HMIS third edition: H = 3* - F = 0 - PH = 1.

- Proposition 65 Warning: This product contains chemicals known to the State of California to cause cancer.

- Pennsylvania Department of Labour and Industry: Hexavalent chromium compounds are on the Right to Know

List as E (Environmental Hazard) and S (Special Hazardous Substance).

- HMIS III : The HMIS III ratings are from the HMIS Third Edition. There have been significant changes made to the system. "PH" stands for "Physical Hazard" as defined in the OSHA Haz Com Standard and replaces the former code "R" for "Reactivity". For a more detailed explanation of the system and the ratings, please contact our Offices at INT = 33 (0)1 30 40 57 57.

INTERNATIONAL STATUS OF THE PRODUCT:

- Europ (EC):

a) REACH status: The substance is preregistered according regulation REACH 1907/2006/EC,

b) EINECS registered substance

c) The substance contains impurities such as zinc potassium chromate and strontium chromate listed in the Candidate list of Substances of Very High Concern for authorisation (06/2011).

d) Starting from 20 June 2011, producers and importers of articles shall notify ECHA within six months, after a substance has been included in the Candidate List, if the substance is present in those articles in quantities totalling over one tonne, per producer or importer per year, and if the substance is present in those articles above a concentration of 0.1 % weight by weight. This is required for producers and importers of articles when all conditions of Article 7(2) are met according REACH regulation 1907/2006/EC. Exemption from obligation possible on the basis of: A notification is not required when:

> The substance has already been registered for that use (Zinc potassium chromate and strontium chromate are registered for the following uses: anticorrosive

pigment for paints (solid corrosion inhibitor). Pigment reserved for industrial use (OEM): aerospace and car refinishing and Coil coating, [strontium chromate only]),

Exposure of humans and the environment can be excluded during the use and disposal of the article.

In such cases, the producer or importer shall however supply appropriate instructions to the recipient of the article.

Upon request of a consumer, the article supplier has to provide relevant safety information about SVHC (Article 33(2) 1907/2006/EC) when the concentration in article exceeds the 0.1% threshold.

d) This product does not meet with: Rosh directive ((Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) 2002/95/CE) for Lead, Cadmium, hexavalent Chromium, Mercury, Diphenylethers Polybrominated and Polybromated Biphenyls and ELV (End Life of Vehicles) directive 2000/53/EC.

USA: Substance TSCA registered.

Canada: Listed on the Domestic Substance List (DSL).

Japan: Listed on the MITI.

Australia: Listed in the AICS.

L. CORNELISSEN & SON

Artists' Colourmen

Suppliers of Materials for Painters, Gilders & Printmakers

Safety Data Sheet according to Directive 91/155/EC

Revision Date: January 2017

1) Identification of the substance/preparation and the company

Trade Name: Cornelissen Synthetic Earth Pigments. Includes: Mars Red, Mars Violet, Mars Yellow, Translucent Orange Oxide, Translucent Red Oxide, Translucent Yellow Oxide.

Application: Artists' Pigment

Manufacturer/Supplier:

L Cornelissen & Son Ltd
105 Great Russell Street
London WC1B 3RY

Tel: 020 7636 1045
Fax: 020 7636 3655

www.cornelissen.com

2) Hazards Identification

Classification of the Substance or Mixture

Classification according to EC Regulation 1272/2008

This product does not require classification and labelling as hazardous according to CLP/GHS.

Label Elements

Classification according to EC Regulation 1272/2008

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation: Not applicable.

Other Hazards.

N/A

3) Composition/Information on ingredients

Synthetic Iron Oxides.

CAS No: 1309-37-1

4) First Aid Measures

Description of the First Aid Measures

Eye contact:	Flush eye with flowing water.
Skin contact:	Wash with soap & water & rinse thoroughly.
Inhalation:	Remove subject to fresh air.
Ingestion:	No special measure required.

Most important Symptoms and Effects, both Acute and Delayed

Symptoms:	No further information available.
Effects:	No further information available.

Indication of any Immediate Medical Attention and special Treatment needed

Treatment:	No further information available.

5) Fire Fighting Measures

This product is not flammable and does not produce a toxic effect.

Extinguishing Media

Extinguishing Media:	No restriction in fire situations.

Unusual fire and explosive hazards: None.

Special Hazards arising from the Substance or Mixture

Special hazards:	No special hazards.

Advice for Firefighters

Protective equipment:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:	Wear appropriate protective equipment. Keep spectators away. Ensure adequate ventilation. Floor may be slippery; use care to avoid falling.

Environmental Precautions

Environmental precautions:	Prevent contamination of soil, drains and surface waters. Contact local authorities if product pollutes soil or vegetation.

Methods and Material for Containment and Cleaning Up

Methods and material:	Clean up mechanically. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

Reference to other Sections

In case of emergency, see Section 1. Protective clothing, see Section 8. See Section 13 for information on disposal.

7) Handling and Storage

Precautions for Safe Handling

Instructions on safe handling: No special measures necessary if properly handled. Usual precautions for nuisance dust should be observed. In case of release or spillage clean up with wetting of material and avoid dusting.

Hygienic measures: No special measures required.

Conditions for Safe Storage, including any Incompatibilities

Storage conditions: Store dry and in the original tightly sealed containers. A moderately dry, well ventilated area is considered suitable for handling and storage.

Requirements for storage areas and containers: No special measures necessary.

Information on fire and explosion protection: No special measures necessary.

Storage class (VCI): 13; Non combustible solids

Further Information: No information available.

Specific End Use(s)

Further information: No information available.

8) Exposure/Personal Protection

Parameters to be Controlled

Parameters to be controlled (EC):

Derived No-Effect Level (DNEL):

DNEL/DMEL: 10 mg/m3 (worker, inhalation, long-term exposition - systemic effects)
3 mg/m3 (worker, inhalation, long-term exposition)

Predicted No-Effect Concentration (PNEC):

Additional Information:

Workplace Exposure Limit (WEL): The user must take precautions to ensure that the environmental controls employed are adequate to maintain the exposure level below the WEL.

Exposure Controls

Technical protective measures: Ensure adequate ventilation, especially in confined areas.

Personal Protection

General protective measures:	Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work. Wash contaminated clothes before reuse.
Respiratory protection:	Dust mask.
Hand protection:	Protective gloves (EN 374)
Eye protection:	Safety glasses with protective shields (EN 166).
Body protection:	Protective clothing.

9) Physical and chemical Properties

Information on Basic Physical and Chemical Properties

Appearance: Powder

Odour: None

Boiling point: N/A

Melting point: >1000°C

Flash point: N/A.

Ph: 5-8

Solubility: Insoluble in water.

Flammability: N/A.

Extinguishing media: No restriction

10) Stability and Reactivity

Reactivity

No information available.

Chemical Stability

The product is stable.

Possibility of Hazardous Reactions

This material is considered to be stable.

Conditions to Avoid

No information available.

Incompatible Materials

No information available.

Hazardous Decomposition Products

None if stored and handled according to specifications.

11) Toxicological Information

Information on Toxicological Effects

LD50, oral:	> 5000 mg/kg (rat)

Primary effects

Irritant effect on skin:	Non irritating
Irritant effect on eyes:	Non-irritating to eyes
Inhalation:	No information available.
Ingestion:	No information available
Sensitization:	No sensitizing effect.
Mutagenicity:	Not mutagenic
Reproductive toxicity:	No data available.
Cancerogenity:	Negative
Teratogenicity:	No information available.

Specific target organ toxicity (STOT): No data available.

Additional toxicological information:

Chronic effects:	Inhalation: Repeated or prolonged inhalation of dust can cause a chronic irritation of the respiratory tract.

12) Ecological Information

Aquatic Toxicity

No information available.

Persistency and Degradability

Methods for the evaluation of the biological degradability are not applicable for inorganic substances.

Bioaccumulation

No information available.

Mobility

No information available.

Results of PBT- und vPvP Assessment

Not applicable.

Other Adverse Effects

Water hazard class:	Not hazardous.

No special effects or hazards known.

13) Disposal Information

Waste Treatment Methods

Examine possibilities for recycling.

Return large quantities to the manufacturer.

Dispose in accordance with all applicable local & national regulations.

14) Transport Information

Not classified as a dangerous good under transport regulations.

Keep separated from foodstuffs.

15) Regulatory Information

Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class: 0, not hazardous

16) Other information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist

MATERIAL SAFETY DATA SHEET

SECTION I – PRODUCT AND COMPANY IDENTIFICATION

SAFETY DATA SHEET
(According to 91/155/EEC - Revision REACH 01/07/08 – date emission 2/08/2004)

1- Commercial Product name: **OCKER DUNKEL (TR/0276)**

Company:

The Earth Pigments Company, LLC
PO Box 1172 Cortaro, AZ 85652 Phone: 520-682-8928 email: info@earthpigments.com

2- Hazard identification

Not necessary.

3- Composition / Chemical characterisation

CAS number: 999999-99-4
EINECS: 310-127-6

4- First aid measures:

Inhalation:	If inhaled, move to fresh air
Eyes:	Flush eye with flowing water
Skin:	Wash affected skin with soap and water
Ingestion:	If swallowed, dilute with water and induce vomiting.

5- Fire fighting measures:

This product is not flammable, it doesn't produce toxic effect.
Unusual fire and explosion hazards: none

6-Accidental release measures:

Personal precautions:	clean up with the appropriate personal equipment
Environmental precautions:	The product is not dangerous for the nature

7 -Handling and storage:

A moderately dry, well-ventilated area is considered suitable for handling and storage.
Usual precautions for nuisance dust should be observed.
Steps to be taken in case material is released or spilled: clean up with wetting or material avoiding dusting.

8- Explosion control / personal protection:

Respiratory/ eye/ hand protection: not necessary
Respiratory protection is advisable in dusty place.
TLV-TWA = 10 mg/m3

9- Physical & chemical properties:

Appearance:	powder
Odour	none
pH	6/7
Solubility in water:	insoluble in water
Specific gravity:(H_2O=1)	ca. 1,10 gr/cm^3
Boiling /melting/flash point:	not applicable
Flammability/auto flammability:	none
Extinguishing media:	no restriction

10- <u>Stability and reactivity</u>:

Stability:	stable under normal conditions of storage and use
Hazardous reactions:	none

11- <u>Toxicological information</u>:

The product is not toxic

Acute oral toxicity:	LD50 (rat) > 5 g /kg

12- <u>Ecological information</u>

Not dangerous for the nature

13- <u>Disposal considerations</u>:

Consult a local expert for advice on the disposal of the material.
Ensure that disposal is in compliance with local, national regulations.

14- <u>Transport information</u>

no restrictions.

15- <u>Regulatory information</u>:

The product is not a substance subjected to mandatory marking with the EEC Directive 67/548/EEC. It is a natural product.

16- <u>Other information</u>

The information herein is based on the present state of our knowledge, but without liability.

Date: 09/03/16

FICHE DE DONNEES DE SECURITE

OMBRE DE CHYPRE B

SAFETY DATA SHEET

(According to 91/155/EEC – Revision REACH 01/07/08 – date emission 2/08/2004)

1- Commercial Product name: **T. OMBRA CIPRO BRUC. B (TR/0271)**

Company/ distribution: **Ste des ocres de France**
Impasse des Ocriers
84400 – APT – France

Telephone number for urgent call: Tel.: 00.33 (0)490.746.382

e-mail: info-distribution@ocres-de-france.com

2- Hazard identification

Not necessary.

3- Composition / Chemical characterisation

Milled and purified burnt (400°) umber earth of Cyprus.
C.I. : Pigment brown 7
CAS number 12713-03-0

4- First aid measures:

Inhalation:	If inhaled, move to fresh air
Eyes:	Flush eye with flowing water
Skin:	Wash affected skin with soap and water
Ingestion:	If swallowed, dilute with water and induce vomiting.

5- Fire fighting measures:

This product is not flammable, it doesn't produce toxic effect.
Unusual fire and explosion hazards: none

6-Accidental release measures:

Personal precautions:	clean up with the appropriate personal equipment
Environmental precautions:	The product is not dangerous for the nature

7 -Handling and storage:

A moderately dry, well-ventilated area is considered suitable for handling and storage.
Usual precautions for nuisance dust should be observed.
Steps to be taken in case material is released or spilled: clean up with wetting or material avoiding dusting.

8- Explosion control / personal protection:

Respiratory/ eye/ hand protection: not necessary
Respiratory protection is advisable in dusty place.
TLV-TWA = 10 mg/m3

9- Physical & chemical properties:

Appearance:	powder
Odour	none
pH	6-9
Solubility in water:	insoluble in water
Specific gravity:(H_2O=1)	ca. 0,950
Boiling /melting/flash point:	not applicable
Flammability/auto flammability:	none
Extinguishing media:	no restriction

10- Stability and reactivity:

Stability:	stable under normal conditions of storage and use
Hazardous reactions:	none

11- Toxicological information:

The product is not toxic
Acute oral toxicity: LD50 (rat) > 5 g /kg

12- Ecological information

Not dangerous for the nature

13- Disposal considerations:

Consult a local expert for advice on the disposal of the material.
Ensure that disposal is in compliance with local, national regulations.

14- Transport information:

no restrictions.

15- Regulatory information:

The product is not a substance subjected to mandatory marking with the EEC Directive 67/548/EEC. It is a natural product.

16- Other information

The information herein is based on the present state of our knowledge, but without liability.

Date: 11/02/11

FICHE DE DONNEES DE SECURITE

BLEU INDIEN

1. IDENTIFICATION DE LA SUBSTANCE / PREPARATION ET DE LA SOCIETE / ENTREPRISE

Identification de la substance ou de la préparation

Nom du produit	BLEU INDIEN
Utilisation du produit	Matière colorante
Fournisseur / Fabricant	STE DES OCRES DE France Impasse des Ocriers 84400 – APT – France
Numéro de téléphone d'appel d'urgence	01 40 05 48 48 (centre anti-poison)

2. IDENTIFICATION DES DANGERS

La préparation n'est pas classée comme dangereuse selon la Directive 67/548/CEE et ses amendements.
Pour plus de détails sur les conséquences en termes de santé et les symptômes, reportez-vous à la section 11.
Classification de la substance ou de la préparation selon le règlement 1272/2008/CE (CLP/GHS) : la préparation n'est pas classée

3. COMPOSITION / INFORMATIONS SUR LES COMPOSANTS

CI : W18 - B15-B29
Substance/ préparation : Préparation
Numéros cas : néant
Numéros einecs : néant
A la connaissance actuelle du fournisseur, ce produit ne contient pas d'ingrédients dangereux pour nécessiter une déclaration dans cette section, conformément aux règlements de l'UE ou aux

règlements nationaux.

4. PREMIERS SECOURS

Premier secours

Inhalation	Transporter la personne incommodée à l'air frais. En cas d'évanouissement, placer la personne en position latérale de sécurité.
Ingestion	Aucune mesure spéciale requise
Contact avec la peau	Rincer immédiatement les yeux à grande eau, en soulevant de temps en temps les paupières. Vérifier si la victime porte des verres de contact et dans ce cas les lui enlever. En cas d'irritation, consulter un médecin.

5. MESURES DE LUTTE CONTRE L'INCENDIE

Moyens d'extinction Utilisables	Eau pulvérisée, mousse
Non utilisable	Dioxyde de carbone (déconseillé)
Risques particuliers liés à l'exposition au produit	Dégagement d'oxyde de carbone,d' oxyde d'Azote,dioxyde de soufre
Equipement de protection spécial pour le personnel préposé à la lutte contre l'incendie	Les pompiers devront porter un équipement de protection approprié ainsi qu'un masque.

6. MESURES A PRENDRE EN CAS DE REJET ACCIDENTEL

Précautions individuelles	Aucune initiative ne doit être prise qui implique un risque individuel ou en l'absence de formation appropriée. Empêcher l'accès aux personnes non requises et ne portant pas de vêtements de protection. Assurer une ventilation adéquate. Revêtir un équipement de protection individuelle approprié.

Précautions relatives à l'environnement	Eviter la dispersion et l'écoulement du produit répandu ainsi que le contact avec le sol, le milieu aquatique environnant, les égouts ou conduits d'évacuations. Informer les autorités compétentes en cas de pollution de l'environnement par le produit.

7. MANIPULATION ET STOCKAGE

Manipulation	Aucune mesure spéciale n'est requise
Stockage	Pas de mesure particulière
Matériaux d'emballage	Utiliser l'emballage d'origine

8. CONTROLE DE L'EXPOSITION / PROTECTION INDIVIDUELLE

Valeurs limites d'exposition	Non disponible
Mesures d'hygiène	Se laver les mains, les avant-bras et le visage après avoir manipuler le produit.
Protection respiratoire	Recommandé : masque de protection anti-poussière
Protection des mains	Recommandé : gants
Protection des yeux	Utiliser une protection oculaire conforme à une norme approuvée
Protection de la peau	L'équipement de protection personnel pour le corps devra être choisi en fonction de la tâche à réaliser ainsi que des risques encourus, et il est recommandé de le faire valider par un spécialiste avant de procéder à la manipulation du produit.

9. PROPRIETES PHYSIQUES ET CHIMIQUES

informations générales	
Aspect	
Etat physique	Solide [poudre]
Couleur	Bleu
Odeur	Inodore

PH	7-8
Température de décomposition	
Densité apparente	1200 g/l

10. STABILITE ET REACTIVITE

Stabilité	le produit est stable jusqu'à 350°c
Température de décomposition	-----
Produits de décomposition	Sulfure d'hydrogène au contact des acides Dioxyde de soufre par combustion

11. INFORMATIONS TOXICOLOGIQUES

Le produit n'est pas classé comme dangereux

12. INFORMATIONS ECOLOGIQUES

Pigment stable sauf en milieu acide. Pas de danger pour l'environnement.

13. CONSIDERATIONS RELATIVES A L'ELIMINATION

Méthodes d'élimination des déchets	Vérifier l'aptitude du produit à être réutilisé. Les déchets et emballages vidés non nettoyés doivent être emballés ou fermés, étiquetés et évacués vers un centre de destruction ou de recyclage en respectant la législation nationale en vigueur. Consulter le fabricant en cas de quantités importantes. En cas de réexpédition de récipients vides non nettoyés, signaler au destinataire les risques éventuels encourus du fait des résidus du produit. Pour l'élimination au sein de l'UE, utiliser le code déchet en vigueur selon la liste Européenne des déchets (LED). Tout producteur de déchets est entre autres tenu de classer ses déchets selon le code de catégorie et de procédé de la Liste

	Européenne des Déchets. (LED).
Déchets dangereux	A la connaissance actuelle du fournisseur, ce produit n'est pas considéré comme un déchet dangereux tel que défini par la directive UE 91/689/CEE

14. INFORMATIONS RELATIVES AU TRANSPORT

Réglementation	Numéro ONU	Nom d'expédition	Classe	PG	Etiquette	Autres informations
ADR/RID						non réglementé
GGVSE						non réglementé
ADNR						non réglementé
IMDG						non réglementé
IATA						non réglementé

PG : groupe d'emballage

Non dangereux pour le transport

Ne pas transporter avec des acides

15. INFORMATIONS REGLEMENTAIRES

Réglementation de l'union Européenne

Déterminée en accord avec les directives de l'UE 67/548/EEC et 1999/45/EC (y compris les amendements), la classification et l'étiquetage prennent en compte l'usage prévu du produit.

Applications industrielles

Phrases de risque Ce produit n'est pas classé selon la législation de l'Union européenne

Réglementations nationales

Code de la Sécurité Sociale , Art. L 461 – 1 à L 461- 7 (France) : non concerné

Stockage- Rubrique(s) des ICPE (France) : 2517

Arrété du 11 Juillet 1977 , fixant la liste des travaux nécessitant une surveillance médicale spéciale: non concerné.

16. AUTRES DONNEES

Historique

Date d'impression 23 septembre 2015

Date d'édition 23 septembre 2015

Date de la précédente édition

Avis au lecteur

Les informations portées sont basées sur l'état actuel des connaissances. Cette fiche de données de sécurité décrit le produit sous le seul aspect de la sécurité. Les données ci- dessus n'ont pas valeur de garantie concernant la composition, les propriétés ou la performance des produits.

MATERIAL SAFETY DATA SHEET
ACCORDING TO DIRECTIVE 91/155/EEC

1. IDENTIFICATION OF THE SUBSTANCE, THE PREPARATION AND THE COMPANY

1.1.	IDENTIFICATION OF THE PREPARATION	**SIENNA EARTH**
1.2.	COMMERCIAL DESIGNATION	**NATURAL LIGHT SIENNA**
1.3.	IDENTIFICATION OF THE COMPANY	**STE OCRES DE FRANCE** **Impasse des Ocriers** **F - 84401 APT CEDEX** **Ph: 04.90.74.63.82 / FAX: 04. 90.74.46.75**
1.4.	EMERGENCY PHONE NUMBER	Telephone: + 33 (0) 4.90.74.47.67 Telephone: + 33 (0) 4.90.74.63.82

2. COMPOSITION / INFORMATION OF THE COMPONENTS

2.1.	USUAL NAME:	LIGHT SIENNA
2.2.	CAS NUMBER:	none
2.3.	EINECS NUMBER:	none
2.4.	FORMULA:	SiO2 +Al2O3+Fe2O3
2.5	COLOR INDEX	Y43 – Bk11

3. IDENTIFICATION OF DANGERS

3.1.	SPECIFIC DANGERS:	none

4. FIRST HELP

4.1.	CONTACT WITH EYES	Wash with water while spreading the eyelids In case of obstinate irritation, consult an oculist.
4.2.	CONTACT WITH SKIN	Wash with soapy water and rinse with water
4.3.	INHALATION	Move the person to open air. In case of sickness, consult a doctor
4.4.	INGESTION	In case of suspicions or recurrent symptoms call a doctor

5. BATTLE AGAINST FIRE MEASURES

	MEANS OF EXTINCTION:	
5.1.	Advisable:	Pulverized water, fire extinguisher.
5.2.	Counter indication:	none
5.3.	Specific dangers:	none
5.4.	Protection of the intervening parties:	none

6. MEASURES TO TAKE IN CASE OF ACCIDENTAL DISPERSION

6.1.	PRECAUTIONS FOR THE PROTECTION OF THE ENVIRONMENT: Use an appropriate dumping location
6.2.	Avoid contact with acids

7. HANDLING AND STORAGE

7.1.	HANDLING	Handle avoiding dust emission.
7.2.	PRECAUTIONS	No storage with acids.
7.3.	STORAGE	Stable product in normal storage conditions.
7.4.	STORING ADVISE	Keep bags or buckets away from humidity.
7.5.	INCOMPATIBLE MATTERS	None to our knowledge
7.6.	MATERIAL PACKING	Paper bag or plastic bucket

8. EXPOSURE CONTROL / INDIVIDUAL PROTECTION

8.1.	RESPIRATORY PROTECTION	Wear a protecting mask against dusts
8.2.	HANDS PROTECTION	Wear suitable gloves
8.3.	EYES PROTECTION	Wear protective glasses
8.4.1.	SPECIFIC HYGIENE MEASURES	No food, no drinks, no smoking during use

9. CHEMICAL AND PHYSICAL PROPERTIES

9.1.	PHYSICAL STATE	Powder
9.2.	COLOR	Yellow Greenish
9.3.	DECOMPOSITION TEMPERATURE	180 ° C
9.4.	VISIBLE DENSITY	628 g/l
9.5	PH	7

10. STABILITY AND REACTIVITY

10.1	STABILITY	Stable in normal storage conditions.
10.2	HARMFUL REACTIONS	None, in normal conditions of use.

11. TOXICOLOGICAL INFORMATION

11.1	CUTANEOUS IRRITATION:	Non irritant
11.2	OCULAR IRRITATION:	Non irritant

12. ECOLOGICAL INFORMATION

IMPACT ON THE ENVIRONMENT / ECOTOXICITY
"Ames" Test: Negative

13. ELIMINATION CONNECTED CONSIDERATIONS

PROCEDURE OF NEUTRALIZATION AND DESTRUCTION OF THE PRODUCT /
Eliminate in a controlled dump
PROCEDURE OF DESTRUCTION OF THE CONTAMINATED PACKING /
No reusable packing, to be eliminated in a controlled dump

14. RELATIVE INFORMATION TO THE TRANSPORTATION

14.1	GGVSee/IMDG CODE	---
14.2	GGVE/GGVS	---
14.3	UN No.	---
14.4	RID / ADR	---
14.5	ICAO / IATA-DGR	---
14.6	ADNR	---

INTERNATIONAL REGULATION: This product is not regulated. Sensible to humidity and odors. Keep away from food, acids and its basis.

15. AUTHORIZED INFORMATION

No dangerous product for the transportation regulation

16. OTHER INFORMATION

This safety card has been achieved in accordance with T01-102/12/92 guideline and 91/155/EG.
The indicated information is based on the state of our knowledge of the concerned product.
Information and recommendations contained in this form are only based on estimated data.
Nevertheless it can be given no insurance or relative guarantee to the present information.
SOCIETE DES OCRES DE FRANCE. F - 84401 APT CEDEX

MATERIAL SAFETY DATA SHEET

ACCORDING TO DIRECTIVE 91/155/EEC

1. IDENTIFICATION OF THE SUBSTANCE, THE PREPARATION AND THE COMPANY

1.1.	IDENTIFICATION OF THE SUBSTANCE	**PLUM**
1.2.	IDENTIFICATION OF THE COMPANY	**STE OCRES DE FRANCE** **Impasse des Ocriers** **F - 84401 APT CEDEX** **Tél: 04.90.74.63.82 / FAX: 04. 90.74.46.75**
1.3.	EMERGENCY PHONE NUMBER	Telephone : + 33 (0) 4.90.74.47.67 Telephone : + 33 (0) 4.90.74.63.82

2. COMPOSITION / INFORMATION OF THE COMPONENTS

2.	COMPOSITION	FE203 – S102 - MGO ALLUMINOSILICATE

3. IDENTIFICATION OF DANGERS

3.	SPECIFIC DANGERS :	None. Coloured loams are not classified within dangerous components but cannot be used in the pharmaceutical, cosmetics, food industry and subsidiaries sectors.

4. FIRST HELP

4.1.	CONTACT WITH EYES	Wash with water while spreading the eyelids In case of obstinate irritation, consult an oculist.
4.2.	CONTACT WITH SKIN	Wash with soapy water and rinse with water
4.3.	INHALATION	Move the person to open air. In case of sickness, consult a doctor
4.4.	INGESTION	In case of suspicions or recurrent symptoms call a doctor

5. BATTLE AGAINST FIRE MEASURES

	MEANS OF EXTINCTION :	
5.1.	Advisable :	none
5.2.	Counter indication:	none
5.3.	Specific dangers :	none
5.4.	Protection of the intervening parties :	none

6. MEASURES TO TAKE IN CASE OF ACCIDENTAL DISPERSION

6.1.	INDIVIDUAL PROTECTIONS :	Wear protective clothing
6.2.	PRECAUTIONS FOR THE PROTECTION OF THE ENVIRONMENT :	Avoid sewer dumping
6.3.	CLEANING INSTRUCTIONS:	None
6.4.	RECOVERY:	Vacuum Cleaning
6.5.	CLEANING:	Use soapy water

7. HANDLING AND STORAGE

7.1.	HANDLING	Handle avoiding dust emission.
7.2.	PRECAUTIONS	Capture of dusts at the emission source.
7.3.	STORAGE	Stable product in normal storage conditions.
7.4.	STORING ADVISE	Keep bags or buckets away from humidity.
7.5.	INCOMPATIBLE MATTERS	None to our knowledge
7.6.	MATERIAL PACKING	Paper bag or plastic bucket

8. EXPOSURE CONTROL / INDIVIDUAL PROTECTION

8.1.	RESPIRATORY PROTECTION	Wear a protecting mask against dusts
8.2.	HANDS PROTECTION	Wear suitable gloves
8.3.	EYES PROTECTION	Wear protective glasses
8.4.	SPECIFIC HYGIENE MEASURES	No food, no drinks, no smoking during use

9. CHEMICAL AND PHYSICAL PROPERTIES

9.1.	PHYSICAL STATE	Micro Granulate
9.2.	COLOR	Purple Red
9.3.	ODOR	Odourless
9.4.	TEMPERATURE OF FUSION	> 1000 ° C
9.5.	PH VALUE	+/- 8-9

10. STABILITY AND REACTIVITY

10.1 STABILITY	Stable in normal storage conditions.
10.2 HARMFUL REACTIONS	None, in normal conditions of use.

11. TOXICOLOGICAL INFORMATION

Toxicological testing with similar chemical products gave the following information:
DL 50 by oral testing, test on rat: > 5000mg / kg

Rabbit Skin (24H00): Non irritant. Rabbit eye: Non irritant
Under our actual knowledge the pigments manufactured by the company SOCIETE DES OCRES DE FRANCE are physiologically non harmful. Hence in case of eye contact and under the mechanical effect of powder there is a small risk of slight temporary irritation of the ocular mucous membrane and this in extreme situations.

12. ECOLOGICAL INFORMATION

Ecotoxicological studies on similar products have given the following results:
High toxicity on fishes : (Leuciscus Idus) CLO: 1000mg/liter
High toxicity on bacteria : No harmful outcome on pseudomonas putida : > 1000mg/liter
Due to the almost total water insolvability a separation occurs during all filtration or sedimentation process.

13. ELIMINATION CONNECTED CONSIDERATIONS

13.1. PROCEDURE OF NEUTRALIZATION AND DESTRUCTION OF THE PRODUCT
Eliminate in a controlled dump
13.2. PROCEDURE OF DESTRUCTION OF THE CONTAMINATED PACKING /
No reusable packing, to be eliminated in a controlled dump

14. RELATIVE INFORMATION TO THE TRANSPORTATION

14.1	GGVSee/IMDG CODE	---
14.2	GGVE/GGVS	---
14.3	UN No.	---
14.4	RID / ADR	---
14.5	ICAO / IATA-DGR	---
14.6	ADNR	---

INTERNATIONAL REGULATION : This product is not regulated. Sensible to humidity. Keep away from food, acids and its basis. Sensible to odors.

15. AUTHORIZED INFORMATION

This product is not submitted to labelling.
Iron (Fe203, smokes in Fe) : VME = 5 mg/m3 (France)
Dusts : VME = 5mg/m3 in alveolus dust and 10 mg/m3 in total dusts.
CMA Value : 6mg/m3 as alveolus sprayer.

16. OTHER INFORMATION

This safety card has been achieved in accordance with T01-102/12/92 guideline and 91/155/EG. The indicated information is based on the state of our knowledge of the concerned product. Information and recommendations contained in this form are only based on estimated data. Nevertheless it can be given no insurance or relative guarantee to the present information. **SOCIETE DES OCRES DE FRANCE. F - 84401 APT CEDEX**

FICHE DE DONNEES DE SECURITE

NOIR DE VIGNE ALLEMAND

SAFETY DATA SHEET

1- Commercial Product name: **NOIR DE VIGNE ALLEMAND**

Distributor : STE DES OCRES DE France
Impasse des Ocriers
84400 – APT – France

00.33 (0)490.746.382

2- Hazard identification

Not necessary.

3- Composition / Chemical characterisation

Milled and purified natural black earth. (lignite).
C.I. Pigment Black 11
CAS number 1317-61-9

4- First aid measures:

Inhalation:	If inhaled, move to fresh air
Eyes:	Flush eye with flowing water
Skin:	Wash affected skin with soap and water
Ingestion:	If swallowed, dilute with water and induce vomiting.

5- Fire fighting measures:

This product is not flammable, it doesn't produce toxic effect.
Unusual fire and explosion hazards: none

6-Accidental release measures:

Personal precautions:	clean up with the appropriate personal equipment
Environmental precautions:	The product is not dangerous for the nature

7 -Handling and storage:

A moderately dry, well-ventilated area is considered suitable for handling and storage.
Usual precautions for nuisance dust should be observed.
Steps to be taken in case material is released or spilled: clean up with wetting or material avoiding dusting.

8- Explosion control / personal protection:

Respiratory/ eye/ hand protection: not necessary
Respiratory protection is advisable in dusty place.
TLV-TWA = 10 mg/m3

9- Physical & chemical properties:

Appearance:	powder
Odour:	none
pH:	6-9
Solubility in water:	insoluble in water
Specific gravity:(H_2O=1)	ca. 0,800
Boiling /melting/flash point:	not applicable
Flammability/auto flammability:	none
Extinguishing media:	no restriction

10- Stability and reactivity:

Stability:	stable under normal conditions of storage and use
Hazardous reactions:	none

11- Toxicological information:

The product is not toxic

Acute oral toxicity: LD50 (rat) > 5 g /kg

12- Ecological information

Not dangerous for the nature

13- Disposal considerations:

Consult a local expert for advice on the disposal of the material.
Ensure that disposal is in compliance with local, national regulations.

14- Transport information:

no restrictions.

15- Regulatory information:

The product is not a substance subjected to mandatory marking with the EEC Directive 67/548/EEC. It is a natural product.

16- Other information

The information herein is based on the present state of our knowledge, but without liability.

Date: 16/02/11

41000 Van Dyck Brown

1. Identification of the Substance/Mixture and of the Company/Undertaking

1. 1. Product Identifier

Product Name: *Van Dyck Brown*

Article No.: *41000*

1. 2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:

Coloring agent

Uses advised against:

1. 3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: *Kremer Pigmente GmbH & Co. KG*

Address: *Hauptstr. 41-47, 88317 Aichstetten, Germany*

Tel./Fax.: *Tel +49 7565 914480, Fax +49 7565 1606*

Internet: *www.kremer-pigmente.de*

EMail: *info@kremer-pigmente.de*

Importer: --

1. 4. Emergency No.

Emergency No.: *+49 7565 914480 (Mon-Fri 8:00 - 17:00)*

2. Hazards Identification

2. 1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Classification according to Directive No. 67/548/EC or No. 1999/45/EC

The material is not subject to classification according to EC lists.

Safety Phrases:

Possible Environmental Effects:

2. 2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

Hazardous components for labelling:

Other Hazards

next page: 2

2. 3.

3. Composition/Information on Ingredients

3. 1. **Substance**

3. 2. **Mixture**

Chemical Characterization: *Natural Brown 8*

Information on Components / Hazardous Ingredients:

Humic acids, sodium salts (Humic content > 66 %; Na-content: 8.5-9.5 %); REACH Reg. No. 01-2119484865-21-000

CAS-Nr: 68131-04-4
EINECS-Nr: 268-608-0
EC-Nr:

Additional information:

SVHC (Candidate List of Substances of very High Concern): does not contain any substances as listed in Annex XIV of the REACH Regulation 1907/2006/EC.

4. First Aid Measures

4. 1. **Description of the First Aid Measures**

General information:

Seek medical attention in case of complaints.

After inhalation:

Supply fresh air.
In case of complaints consult a physician.

After skin contact:

Wash off with water.
If irritation continues consult a physician.

After eye contact:

Rinse open eyes with plenty of water for at least 15 minutes. Consult physician.

After ingestion:

Rinse mouth with water and give plenty of water to drink. Consult a physician.

4. 2. **Most important Symptoms and Effects, both Acute and Delayed**

Symptoms:

No further information available.

Effects:

4. 3. **Indication of any Immediate Medical Attention and special Treatment needed**

Treatment:

No further information available.

5. Fire-Fighting Measures

5. 1. **Extinguishing Media**

Suitable extinguishing media:

Water mist.
Water jet.

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

Carbon dioxide (CO2)
Water with full jet.

5. 2. **Special Hazards arising from the Substance or Mixture**

Special hazards:

In case of fire: formation of carbon oxides, sodium oxides, hazardous fumes.

5. 3. **Advice for Firefighters**

Protective equipment:

Wear self-contained respiratory protective device and full protective gear.

Further information:

6. Accidential Release Measures

6. 1. **Personal Precautions, Protective Equipment and Emergency Procedures**

Personal precautions:

Wear protective clothing.
Avoid contact with eyes and skin.

6. 2. **Environmental Precautions**

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6. 3. **Methods and Material for Containment and Cleaning Up**

Methods and material:

Take up mechanically and collect in suitable containers for disposal.

6. 4. **Reference to other Sections**

For information for safe handling see Section 7.

7. Handling and Storage

7. 1. **Precautions for Safe Handling**

Instructions on safe handling:

Avoid formation of dust. Do not inhale dust.

Hygienic measures:

Do not eat or drink during work. Do not smoke.

7. 2. **Conditions for Safe Storage, including any Incompatibilities**

Storage conditions:

Store in a cool and dry place.
Protect against humidity and water.

Requirements for storage areas and containers:

Store the product in the original container.

Information on fire and explosion

protection:

Provide adequate exhaust ventilation at places where dust is formed.

Storage class (VCI):

11; Combustible solids

Further Information:

7. 3. **Specific End Use(s)**

Further information:

8. Exposure Controls/Personal Protection

8. 1. **Parameters to be Controlled**

General dust limit

Parameters to be controlled (DE):

Parameters to be controlled:

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8. 2. **Exposure Controls**

Technical protective measures:

Provide adequate ventilation/exhaust system.

Personal Protection

General protective measures:

Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work. Wear adequate protective clothing.

Respiratory protection:

Dust mask recommended when very dusty.

Hand protection:

Protective gloves (EN 374)

Protective glove material:

The glove material must be sufficiently impermeable and resistant against the product.

Eye protection:

Safety glasses (EN 166)

Body protection:

Protective clothing.

Environmental precautions:

Prevent from getting into the soil, surface water and sewage system.

9. Physical and Chemical Properties

9. 1. **Information on Basic Physical and Chemical Properties**

Form:	*powder*
Color:	*dark brown*
Odor:	*none*
Odor threshold:	*No information available.*
pH-Value:	*4 - 5 (20°C)*
Melting temperature:	*not applicable*
Boiling temperature:	*not applicable*
Flash point:	*not applicable*
Evaporation rate:	*This product is a non-volatile solid.*
Flammability (solid, gas):	*not applicable*
Upper explosion limit:	*no information available*
Lower explosion limit:	*no information available*
Vapor pressure:	*not applicable*
Vapor density:	*This product is a non-volatile solid.*
Density:	*1.52 g/cm3 (20°C)*
Solubility in water:	*insoluble*
Coefficient of variation (n-Octanol/Water):	*not determined*
Auto-ignition temperature:	*not applicable*
Decomposition temperature:	*not applicable*
Viscosity, dynamic:	*not applicable*
Explosive properties:	*Product is not explosive.*
Oxidizing properties:	*not oxidizing*

	Bulk density:	*400 - 600 kg/m3*
9. 2.	**Further Information**	
	Solubility in solvents:	
	Viscosity, kinematic	
	Burning class:	
	Solvent content:	
	Solid content:	
	Particle size:	
	Other information:	
		No further information.

10. Stability and Reactivity

10.1.	**Reactivity**	
		Stable if used according to specifications.
10.2.	**Chemical Stability**	
		Stable if used according to specifications.
10.3.	**Possibility of Hazardous Reactions**	
		Risk of explosion with oxidizing agents.
10.4.	**Conditions to Avoid**	
	Conditions to avoid:	
		Avoid humidity.
	Thermal decomposition:	
10.5.	**Imcompatible Materials**	
		Strong oxidizing agents.
10.6.	**Hazardous Decomposition Products**	
		In case of fire: formation of carbon oxides and sodium oxide.
10.7.	**Further Information**	

11. Toxicological Information

11. 1.	**Information on Toxicological Effects**	
	Acute Toxicity	
	LD50, oral:	*> 2000 mg/kg (rat)*
	LD50, dermal:	*> 2000 mg/kg (rat)*
	LC50, inhalation:	
		No information available.
	Primary effects	
	Irritant effect on skin:	
		May cause skin irritation in sensitive persons. *Non irritating (rabbit)*
	Irritant effect on eyes:	
		May cause eye irritation in sensitive persons.

Non-irritating to eyes (rabbit)

Inhalation:

May cause irritation of the respiratory system in sensitive persons.

Ingestion:

May cause irritation of the gastro-intestinal tract in sensitive persons.

Sensitization:

May cause sensitization.

Mutagenicity:

Not mutagenic (OECD 471 Bacterial Reverse Mutation Test)
In vitro Mammalian Chromosomal Aberration Test (OECD 473): negative
In vivo genetic-toxicity: micronucleus negative (National Toxicology Program)

Reproductive toxicity:

No information available.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Repeated exposure: Subacute toxicity (oral): NOAEL: > 500 mg/kg (28 days, rat)

Additional toxicological information:

12. Ecological Information

12. 1. Aquatic Toxicity

Fish toxicity:

LC50: > 128 mg/l (24h, 48h, 72h, 96h; Poecilla reticulata)
NOEC: 128 mg/l (24h, 48h, 72h, 96h; Poecilla reticulata)

Daphnia toxicity:

LC50: > 113 mg/l (24h, 48h; Daphnia magna)
NOEC: 113 mg/l (24h, 48h; Daphnia magna)

Bacteria toxicity:

EC50: > 1000 mg/l (active sludge)

Algae toxicity:

No information available.

12. 2. Persistency and Degradability

Not readily biodegradable (5 %, 28d)

12. 3. Bioaccumulation

logPOW: -2.08 +/- 0.44 (pH 9.5 bei 23°C)

12. 4. Mobility

Surface tension: 66.6 mN/m (20°C)
Adsorption: Adsorption coefficient in soil: log K < 1.3 (pH 1, 25°C)

Adsorption: Adsorption coefficient in sewage sludge: log K < 1.5 (pH 1, 25°C)

12. 5. **Results of PBT- und vPvP Assessment**

Not applicable.

12. 6. **Other Adverse Effects**

Water hazard class:

1 (German Regulation) (Assessment by list): slightly hazardous.

Behaviour in sewage systems:

Further ecological effects:

AOX Value:

13. Disposal Considerations

13. 1. **Waste Treatment Methods**

Product:

Dispose of according to official national and local regulations.

European Waste Code (EWC):

Uncleaned packaging:

Dispose of according to official local regulations.

Waste Code No.:

14. Transport Information

14. 1. **UN Number**

ADR, IMDG, IATA

14. 2. **UN Proper Shipping Name**

ADR/RID:

No hazardous goods according to ADR (land transportation).

IMDG/IATA:

No hazardous goods according to IMDG.

14. 3. **Transport Hazard Classes**

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. **Packaging Group**

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. **Environmental Hazards**

None

14. 6. **Special Precautions for User**

Not classified as a dangerous good under transport regulations.

14. 7. **Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code**

not applicable

14. 8. **Further Information**

15. Regulatory Information

15. 1. **Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture**

Water hazard class:

1, slightly hazardous for water (German Regulation, self-assessment)

Local regulations on chemical accidents:

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

15. 2. **Chemical Safety Assessment**

A Chemical Safety Assessment is not necessary for this product.

15. 3. **Further Information**

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.

Yellow

Bulk
APOTHECARY

Safety Data Sheet
Matte Yellow Oxide Pigment Powder

SECTION 1: Identification

1.1 Product identifier

Product name	Matte Yellow Oxide Pigment Powder
Product number	B-080-color-31
Brand	Bulk Apothecary

1.4 Supplier's details

Name	Bulk Apothecary
Address	115 Lena Dr Aurora OH 44202 United States
Telephone	1-888-728-7612
email	sales@bulkapothecary.com

1.5 Emergency phone number(s)

Domestic: 1-800-633-8253 International: 801-629-0667

SECTION 2: Hazard identification

General hazard statement
Not a hazardous substance or mixture

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

1. Cosmeric Powder Colorant

Concentration	Not specified

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

If inhaled	Remove to fresh air immediately. Contact physician if necessary.
In case of skin contact	Removed contaminated clothing and wash with soap and water.
In case of eye contact	Flush immediately with copious amounts of water. Contact physician if necessary.
If swallowed	Drink plenty of water and consult a physician.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Carbon dioxide, dry chemical or foam recommended

5.2 Specific hazards arising from the chemical
This product is not known to present any fire hazard

5.3 Special protective actions for fire-fighters
Fire personel should wear Self-contained breathing apparatus (SCBA) and full protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Safety glasses with side shields or goggles and rubber gloves. Provide adequate general mechanical exhaust

6.2 Environmental precautions
Prevent material from contaminating soil or entering sewerage and drainage systems

6.3 Methods and materials for containment and cleaning up
Use appropriate NIOSH/MSHA approved respirator. Wear chemical gloves, goggles, and lab coat. Carefully contain spilled material. Deposit spilled material in appropriate waste container

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Store in a cool, dry place. Keep away from excessive heat. Use in a well ventilated area. Wash hands after use.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in ambient location.

SECTION 8: Exposure controls/personal protection

8.3 Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Safety glasses with side shields or goggles

Skin protection
Wear rubber gloves. Wash hands after use.

Respiratory protection
Use NIOSH/MSHA approved air-purifying respirator to control exposure.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Free Flowing Powder
Odor	Odorless
Odor threshold	
pH	
Melting point/freezing point	
Initial boiling point and boiling range	
Flash point	
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability limits	
Vapor pressure	
Vapor density	
Relative density	
Solubility(ies)	
Partition coefficient: n-octanol/water	
Auto-ignition temperature	
Decomposition temperature	
Viscosity	
Explosive properties	
Oxidizing properties	

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable

10.2 Chemical stability

Stable

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
No data

SECTION 12: Ecological information

Toxicity
No data

SECTION 13: Disposal considerations

Disposal of the product
Dispose of in accordance with all applicable federal, state and local regulations. Material may be sent to an approved landfill or licensed treatment, storage and disposal facility.

SECTION 14: Transport information

DOT (US)
Not regulated

IMDG
Not regulated

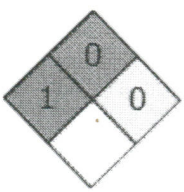
IATA
Not regulated

SECTION 15: Regulatory information

HMIS Rating

Matte Yellow Oxide Pigment Powder	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

NFPA Rating



SECTION 16: Other information

16.1 Further information/disclaimer
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