

Safety Data Sheet
 According to 1907/2006/EC, amended by Regulation (EU) N°
 2015/830

Printing date 29.09.2016

Version number 1001

Revision: 29.09.2016

1 Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name:** Vulk Cement
- **Internal identification code:** 475006
- **Main recommended uses for the substance or product:**
 For further information consult the technical data sheet.
 Vulk Cement is indicated to retread tire processes, by mold cure or precure methods. Is recommended to patch application and inner tube repair, both using hot method.
- **Uses advised against**
 Remove all sources of ignition. Keep away from heat, open flames, hot surfaces, sparks and not smoke.
 This product must not be used for applications other than those recommended in this section
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
 Borrachas Vipal S/A
 Rua Buarque de Macedo 365
 Nova Prata - RS
 95320-000
- **E-mail:** vipal@vipal.com.br
- **1.4 Emergency telephone number:** +55 54 3242 1666

2 Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
 Flam. Liq. 2 H225 Highly flammable liquid and vapour.
 Skin Irrit. 2 H315 Causes skin irritation.
 Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
 Aquatic Acute 1 H400 Very toxic to aquatic life.
 Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
 Naphtha (petroleum), light straight-run
- **Hazard statements**
 H225 Highly flammable liquid and vapour.
 H315 Causes skin irritation.
 H304 May be fatal if swallowed and enters airways.
 H410 Very toxic to aquatic life with long lasting effects.

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Precautionary statements

- P210 *Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.*
- P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
- P301+P310 *IF SWALLOWED: Immediately call a POISON CENTER/ doctor.*
- P305+P351+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
- P403+P235 *Store in a well-ventilated place. Keep cool.*
- P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*

2.3 Other hazards
Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation:** Mixture
- **Description:** Petroleum-naphtha-based adhesive, polymer and additives.

Dangerous components:

CAS: 64741-46-4 EINECS: 265-046-8	Naphtha (petroleum), light straight-run Muta. 1A, H340; Carc. 1A, H350; Asp. Tox. 1, H304	70-100%
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black Self-heat. 2, H252	3-5%
CAS: 1314-13-2 EINECS: 215-222-5	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<1%

Additional information:

For the wording of the listed hazard phrases refer to section 16.

Note P: It is not necessary to classify the substance as cancerigenous, as it contains less than 0.1% m/m of benzene

4 First aid measures

Protection of the First Aid Provider:

Long trousers, long or short sleeved shirt or t-shirt, apron and/or waterproof overalls, nitrile gloves, closed shoes, safety goggles for chemical products and helmet.

4.1 Description of first aid measures
After inhalation:

If case of indisposition, contact the TOXICOLOGY INFORMATION CENTER or a doctor. Bring this MSDS.

Remove the victim to fresh air. If the victim is breathing with difficult, give oxygen. if necessary administer artificial respiration. Seek medical advice.

After skin contact:

Remove contaminated clothing. Wash exposed skin with large amounts of water for at least 30 minutes. Seek medical advice.

After eye contact:

Wash immediately with running water for at least 30 minutes, keeping eyelids open. If it's possible, remove contact lenses and seek immediate medical assistance.

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- **After swallowing:**
Do not induce vomit.
Thoroughly rinse the victim's mouth with water. Seek medical attention.
- **4.2 Most important symptoms and effects, both acute and delayed**
May cause skin irritation with dryness and redness.
May cause eye irritation with tearing, pain and redness.
May cause shortness of breath, cough, dizziness drowsiness, weakness, loss of consciousness and headache.
- **4.3 Indication of any immediate medical attention and special treatment needed**
Avoid contact with the product when helping the victim.
In case of skin contact not rub the affected site.
'If necessary, symptomatic treatment should include, above all, support measures to correction of hydro electrolytic and metabolic disturbances, and respiratory assistance.

5 Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Use chemical-powder (PQS), chemical-foam, or CO2 sprinkles. Use water-mist spout to cool down adjacencies.
- **For safety reasons unsuitable extinguishing agents:** Jet of water.
- **5.2 Special hazards arising from the substance or mixture**
Dangerous when exposed to excessive heat or other sources of ignition.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Self-contained breathing apparatus (SCBA), complete protective clothing, and leather gloves.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
- **For people who are not part of the emergency services:**
Eliminate all ignitions sources. Do not smoke.
Do not touch nor walk over spilt product.
Avoid inhalation, contact with eyes and skin.
- **For people part of the emergency services:**
Isolate the area in a radius of at least 50 meters, in all directions.
Use waterproof protection clothes, nitrile gloves, closed shoes, protection goggles, and breathing mask for organic vapors.
Maintain unauthorized people away.
- **6.2 Environmental precautions:**
Isolate the area of the accident.
Stop leaking avoiding contact with the skin and with clothes.
Do not allow to enter sewers/ surface or ground water.
Prevent seepage into sewage system, workpits and cellars.
- **6.3 Methods and material for containment and cleaning up:**
Collect the material and put it into adequate containers, duly labeled for further treatment and disposal.
Using water mist or vapor suppressing foam to reduce the dispersion of vapors
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
 See Section 13 for disposal information.

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7 Handling and storage

- **7.1 Precautions and directions for safe handling:**
 Handle the product in ventilated area or with general ventilation/exhaust system.
 Avoid incompatible materials contact.
 Avoid the formation of vapors or mists.
- **Information about fire - and explosion protection:**
 Avoid the formation of static loads.
 Keep ignition sources away - Do not smoke.
- **Hygienic measures:**
 Wash your hands before eating, drinking, smoking or using the toilet. Contaminated clothing should be changed and washed before reuse.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Prevention of fire and explosions:**
 Remove all sources of ignition. Keep away from heat, open flames, hot surfaces, sparks and not smoke.
 Inspect containers for damage or leaks before handling them.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **7.3 Specific end use(s)**
 Vulk Cement is indicated to retread tire processes, by mold cure or precure methods. Is recommended to patch application and inner tube repair, both using hot method.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**
 The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
 At this time, the remaining constituent has no known exposure limits.

1333-86-4 Carbon black

WEL	Short-term value: 7 mg/m ³ Long-term value: 3.5 mg/m ³
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1314-13-2 zinc oxide

PEL-TWA 5 mg/m³ (fumes); 10 mg/m³ (total dust); 5 mg/m³ (breathable fraction)(OSHA, 2010)

· **Ingredients with biological limit values:**

1314-13-2 zinc oxide

Not established

1333-86-4 Carbon black

Not established

64741-46-4 Naphtha (petroleum), light straight-run

Not established

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· 8.2 Engineering control measures:

Provide mechanical ventilation and exhaust system so to maintain the vapor concentration lower than the tolerance limit.

· Personal protective equipment:
· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Recommended: Half-face mask with filter for organic vapors.

· Protection of hands and body:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Prior to contact with the waterinsoluble substance / product / preparation apply watersoluble skin-protecting agent (fat-free film former or O/W-emulsions).

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Use waterproof clothes.

Recommended: Nitrile gloves

· Thermal Hazards: Not available.
· Eye protection:


Tightly sealed goggles

· Limitation and supervision of exposure into the environment

Steam aspiration systems must be projected in observance to local regulations concerning limits of emission of volatiles substances.

9 Physical and chemical properties

· Appearance:

Form: Viscous liquid

Colour: Black

· Odour and odour limit: Characteristic

· pH: Not available.

· Change in condition

Melting point/freezing point: Not available.

Initial boiling point and temperature range: 65-125 °C (naphtha)

· Flash point: -35 °C (naphtha)

· Flammability (solid, gaseous): Flammable.

· Decomposition temperature: Not available.

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· Self-igniting:	Not available
· Lower/upper limit of flammability or explosiveness:	
Lower:	Not available
Upper:	Not available
· Vapour pressure:	Not available.
· Density at 23 °C:	0.70-0.74 g/cm ³
· Relative density	Not available.
· Vapour density	Not available.
· Solubility:	
water:	Insoluble.
· Partition coefficient (n-octanol/water):	4.85 log kow (naphtha)
· Viscosity:	
Dynamic at 23 °C:	420-520 cPs
Kinematic:	Not available.
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity and chemical stability:**
 Stable in normal use conditions.
 May have reactions with incompatible materials.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Elevated temperatures. Ignition sources and incompatible materials contact.
- **10.5 Incompatible materials:** Strong oxidizers and acids.
- **10.6 Hazardous decomposition products:**
 A toxic gas mixture is formed upon combustion, chiefly containing CO₂ and CO.

11 Toxicological information

- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

1314-13-2 zinc oxide

Oral	LD50	> 5000 mg/kg (rat)
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64741-46-4 Naphtha (petroleum), light straight-run

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	3000 mg/kg (rabbit)

1333-86-4 Carbon black

Oral	LD50	10000 mg/kg (rat)
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- **Skin corrosion/irritation:** It causes skin irritation with dryness, redness, and cracks.
- **Serious eye damage/irritation:** It can cause eye irritation accompanied by redness.

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- **Respiratory or skin sensitisation:**
May cause dermatitis with dryness by repeated or prolonged exposure. Not expected to give rise sensitization breathing.
- **Germ cell mutagenicity:** *It is not expected mutagenic effects in germ cells.*
- **Carcinogenicity:** *It is not expected that the product presents carcinogenicity to humans.*
- **Reproductive toxicity:** *It is not expected to present toxicity to reproduction and lactation.*
- **Toxicity for specific target organ-single exposure:**
It can cause respiratory tract irritation and narcotic effects with breathlessness, cough, dizziness, drowsiness, weakness, loss of consciousness and headache.
- **Toxicity for specific target organ-repeated exposure:**
It can cause damage to the central nervous system and peripheral nervous system by reptida and prolonged exposure.
- **Aspiration hazard:** *It is not expected that the product presents aspiration hazard.*

12 Ecological information

- **Ecotoxicity:**
Naphtha: EC50 (algae, 96h): 0,26 mg/L
Carbon black: EC50 (algae, 72h): > 10.000 mg/L
LC50 (fish, 96h): > 1000 mg/L
Zinc oxide: LC50 (fish, 96h): 2246 mg/L
- **12.2 Persistence and degradability**
It is expected that the product presents persistence and is not rapidly degraded.
- **12.3 Bioaccumulative potential**
Naphtha: Log_{kow}: 4,85
It is expected potential for bioaccumulation in aquatic animals.
Zinc oxide: BCF: 3
Log_{kow}: 1,53
- **12.4 Mobility in soil** *Undetermined.*
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*
- **12.6 Other adverse effects** *No further relevant information available.*

13 Disposal considerations

- **13.1 Waste treatment methods:**
- **Product:**
Must be disposed of as hazardous waste in accordance with local regulations. The treatment and disposal must be evaluated for each particular product. Federal, state and municipal laws should be consulted.
Packaging (plastic and/or cardboard), if not contaminated, should be discarded in accordance to present law.
- **Product remains:**
Keep the product remains in its original packaging and properly closed. Disposal should be carried out as established for the product.

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- **Uncleaned packaging:**
- **Recommendation:**

Do not reuse empty containers. These may contain residues of the product and should be kept closed and sent for proper disposal as required for the product.

14 Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN1133
· 14.2 UN proper shipping name · ADR, IMDG, IATA	1133 ADHESIVES, containing flammable liquid
· 14.3 Transport hazard class(es) · ADR, IMDG, IATA · Class	3 Flammable liquids.
· 14.4 Packing group	II
· 14.5 Environmental hazards: · Marine pollutant:	Product contains environmentally hazardous substances: zinc oxide Symbol (fish and tree)
· 14.6 Special precautions for user · EMS Number:	Warning: Flammable liquids. F-E,S-D
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ) · Transport category · Tunnel restriction code	Not available. Not available. No available Not applicable
· IMDG · Limited quantities (LQ)	Waterway: IMO - "International Maritime Organization" International Maritime Dangerous Goods Code (IMDG Code) 5L
· IATA	Aerial: IATA - "International Air Transport Association" Dangerous Goods Regulation (DGR)
· UN "Model Regulation":	UN1133, ADHESIVES, containing flammable liquid 3, II

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15 Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Labelling according to Regulation (EC) No 1272/2008**
 The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
Naphtha (petroleum), light straight-run
- **Hazard statements**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H304 May be fatal if swallowed and enters airways.
H410 Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**

<i>P210</i>	<i>Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</i>
<i>P280</i>	<i>Wear protective gloves/protective clothing/eye protection/face protection.</i>
<i>P301+P310</i>	<i>IF SWALLOWED: Immediately call a POISON CENTER/ doctor.</i>
<i>P305+P351+P338</i>	<i>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</i>
<i>P403+P235</i>	<i>Store in a well-ventilated place. Keep cool.</i>
<i>P501</i>	<i>Dispose of contents/container in accordance with local/regional/national/international regulations.</i>
- **Directive 2012/18/EU**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** *100 t*
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** *200 t*
- **REGULATION (EC) No 1907/2006 ANNEX XVII** *Conditions of restriction: 3*
- **15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
This form provides information on protection, health, safety and the environment. Note that the handling of any chemical substance requires prior knowledge of its dangers to users.
The company using the product is responsible for providing training for its employees and hired parties with regards to the possible adverse risks of the product.

- **Training hints**
The user of this product should be qualified for handling, operation and application of the product.
- **Abbreviations and acronyms:**
Flam. Liq. 2: Flammable liquids – Category 2
Self-heat. 2: Self-heating substances and mixtures – Category 2
Skin Irrit. 2: Skin corrosion/irritation – Category 2

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*Muta. 1A: Germ cell mutagenicity – Category 1A**Carc. 1A: Carcinogenicity – Category 1A**Asp. Tox. 1: Aspiration hazard – Category 1**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1***· Sources***SYSTEM OF CHEMICAL EXPOSURE HAZARD (SIRETOX). Available at: <<http://www.siretox.com.br>>. Access: sep. 2015.**BR Petrobras Distribuidora. Material Safety Data Sheet, Solbrax 55/75. Revision 5, 2015.**www.siretox.com.br**www.osha.gov***· * Data compared to the previous version altered.***Amendments regarding the update of the Purple Book.*