

CENTRAL PROTURF Turf Fertilizer with 0.42% Prodiamine Herbicide

SECTION 1: Identification

1.1 Product identifier

Product name

CENTRAL PROTURF Fertilizer with 0.42% Prodiamine Herbicide

1.2 Other means of identification

Granular fertilizer / Pesticide combination

1.3 Recommended use of the chemical and restrictions on use

For turf/ornamental fertilizer applications. See product label for application instructions.

1.4 Supplier's details

Name Address Central Turf & Irrigation

8 Williams St.

Elmsford NY 10523

Telephone

914-347-5656

1.5 Emergency phone number(s)

USA National Capital Poison Center: 1 800 222 1222

SECTION 2: Hazard identification

General hazard statement

Avoid creating dust when handling, using or storing. Use outdoors or in well ventilated area to avoid exposure to dust.

2.1 Classification of the substance or mixture

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

- Carcinogenicity, Cat. 1A
- Specific target organ toxicity (repeated exposure), Cat. 1
- Eye damage/irritation, Cat. 2B
- Skin corrosion/irritation, Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H315 Causes skin irritation H320 Causes eye irritation

H350 May cause cancer [inhalation]

H372 Causes damage to organs [lungs] through prolonged or repeated exposure

inhalation

Precautionary statement(s)

P201 Obtain special instructions before use.

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

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water/...

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.
P321 Specific treatment (see First Aid section).

P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container according to local regulations

2.3 Other hazards which do not result in classification

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2 Mixtures

Name	Product identifier	%	Classification (GHS-US)
Urea	(CAS No) 57-13-6	0.1 - 98	Not classified
Sulfuric acid, dipotassium salt	(CAS No) 7778-80-5	0.1 - 95	Not classified
Limestone	(CAS No) 1317-65-3	0.1 - 95	Not classified
Monoammonium phosphate	(CAS No) 7722-76-1	0.1 - 60	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Urea, polymer with formaldehyde	(CAS No) 9011-05-6	0.1 - 60	Not classified

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Diammonium phosphate	(CAS No) 7783-28-0	0.1 - 50	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335 Aquatic Acute 3, H402
Dantanita	(CAC No.) 4200 70 C	0.1 50	Not classified
Bentonite	(CAS No) 1302-78-9	0.1 - 50	
Potassium chloride	(CAS No) 7447-40-7	0.1 - 20	Eye Irrit. 2B, H320
Ammonium sulfate	(CAS No) 7783-20-2	0.1 - 20	Aquatic Acute 2, H401
Ferrous sulfate	(CAS No) 7720-78-7	0.1 - 20	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400
Manganese oxide (Mn3O4)	(CAS No) 1317-35-7	0.1 - 20	Not classified
Magnesium oxide(MgO)	(CAS No) 1309-48-4	0.1 - 20	Not classified
Potassium nitrate	(CAS No) 7757-79-1	0.1 - 20	Ox. Sol. 2, H272
Iron oxide (Fe2O3)	(CAS No) 1309-37-1	0.1 - 10	Not classified
Magnesium sulfate	(CAS No) 7487-88-9	0.1 - 10	Skin Sens. 1, H317
Sulfate of Potash-Magnesia	(CAS No) 14977-37-8	0.1 - 10	Not classified
Saccharated iron oxide	(CAS No) 8047-67-4	0.1 - 10	Not classified
Carbonic acid, magnesium salt (1:1), mixture with magnesium hydroxide(Mg(OH)2), hydrate	(CAS No) 39409-82-0	0.1 - 10	Not classified
Sulfur	(CAS No) 7704-34-9	0.1 - 5	Comb. Dust Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Aquatic Acute 3, H402
Sodium chloride	(CAS No) 7647-14-5	0.1 - 5	Not classified
Manganese	(CAS No) 7439-96-5	0.1 - 5	Not classified

This Safety Data Sheet is not a guarantee of product specification or NPK value(s).

Trade secret statement (OSHA 1910.1200(i))

*The specific chemical identities and/or actual concentrations or actual concentration ranges for one or more listed components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i). Note: The balance of the ingredients are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided by a qualified operator. Get medical attention if irritation develops and persists

In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Get medical attention if irritation develops and persists.

In case of eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get medical attention if irritation develops and persists.

If swallowed Call a poison center or doctor if you feel unwell. If vomiting occurs naturally,

have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Refer to first-aid section of product label

4.2 Most important symptoms/effects, acute and delayed

INHALATION: May cause respiratory irritation.

SKIN: Skin irritation

EYES: Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage

including blindness could result.

INGESTION: May cause discomfort if swallowed. May be harmful if swallowed in large quantities.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing agent suitable for type of surrounding fire. Avoid excessive water to minimize runoff. Prevent firefighter water from entering the environment.

Small fires: Water spray, foam, dry chemical or CO2

Large fires: Water spray, fog or foam.

5.2 Specific hazards arising from the chemical

Container may rupture on heating. Cool closed containers exposed to fire with water spray. Do not allow run-off from firefighting to enter drains or water courses. Explosive reactions with oxidizing agents such as potassium chlorate and/or peroxides. In case of fire hazardous decomposition products may be produced such as:

Ammonia

Carbon monoxide

Carbon dioxide (CO2)

Potassium chloride: Hydrogen chloride gas, Potassium oxides

Bentonite: Aluminum oxide, silicon oxide

5.3 Special protective actions for fire-fighters

In the event of fire and/or explosion do not breathe fumes. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Unprotected persons must be kept away. Evacuate personnel to safe areas. Provide adequate ventilation. Avoid dust formation. Avoid breathing dust.

6.2 Environmental precautions

Fertilizers will dissolve and disperse in water and promote algae growth, notify downstream water users of any release that may affect water quality

Methods and materials for containment and cleaning up

Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Clean contaminated surface thoroughly.

Pick up and arrange disposal without creating dust. Use a suitable vacuum cleaner.

SECTION 7: Handling and storage

Precautions for safe handling 7.1

Keep out of reach of children. Do not swallow. Avoid breathing dust or mist. Avoid contact with eyes, skin, and clothing. Keep away from heat, sparks and flame. Good housekeeping and controlling of dusts are necessary for safe handling of product. Wash thoroughly after handling. Eating, drinking and smoking is prohibited when handling product. Use with adequate ventilation. Provide exhaust ventilation if dust is formed. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Containers should be protected against falling down. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store away from incompatible substances. Avoid generation and spreading of dust.

SECTION 8: Exposure controls/personal protection

Control parameters

o.i Control parameters		
Iron oxide (Fe2O3) (1309-37-1)		
USA ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³
USA IDLH	US IDLH (mg/m³)	2500 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³
Magnesium oxide (MgO) (1309-48-4)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA IDLH	US IDLH (mg/m³)	750 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³
Limestone (1317-65-3)		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	5 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	5 mg/m³
Manganese (7439-96-5)		
USA ACGIH	ACGIH TWA (mg/m³)	0.1 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³
USA NIOSH	NIOSH REL (STEL) (mg/m³)	3 mg/m³
USA IDLH	US IDLH (mg/m³)	500 mg/m³
USA OSHA	OSHA PEL (Ceiling) (mg/m³)	5 mg/m³

Appropriate engineering controls

Exposure Controls Appropriate

Ensure all national/local regulations are observed.

Engineering Controls Personal Protective Equipment

Gloves. Safety glasses. Protective clothing. Insufficient ventilation:

wear respiratory

protection.









Materials for Protective Clothing Hand Protection Eye Protection

Chemically resistant materials and fabrics. protective gloves.

Chemical goggles or safety glasses.

Skin and Body Protection Respiratory Protection

Other Information

Wear suitable protective clothing.

If exposure limits are exceeded or irritation is experienced, NIOSH

approved respiratory protection should be worn.

When using, do not eat, drink or smoke.

Respiratory protection

A NIOSH approved air purifying respirator with a type 95 (R or P) particulate filter may be used under conditions where airborne concentrations are expected to exceed exposure limits or respiratory irritation is experienced. Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed if workplace conditions warrant a respirator use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Odor

Odor threshold

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Melting point/freezing point

Initial boiling point and boiling range

Flash point Evaporation rate

Flammability (solid, gas)

Upper/lower flammability limits
Upper/lower explosive limits

Vapor pressure

Vapor density Relative density

Relative density Solubility(ies)

Partition coefficient: n-octanol/water

Auto-ignition temperature Decomposition temperature

Viscosity

Explosive properties

Oxidizing properties

Multi-color granules

No data available.

No data available. No data available.

No data available.

No data available.

No data available.

No data available.

No data available.

No data available.

No data available. No data available.

No data available.

No data available.

No data available.

No data available.

No data available.

Other safety information

Bulk Density: 63.4

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage and use conditions. Some components may react if exposed to incompatible materials.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization does not occur.

10.4 Conditions to avoid

Contact with incompatible materials. Keep away from open flames, hot surfaces, and sources of ignition.

10.5 Incompatible materials

Contact with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride may cause fire and/or explosions. Some components of limestone may react vigorously with water and strong acids.

Silica, crystalline: Hydrogen fluoride

Kaolin: Strong oxidizing agents

Potassium chloride: Strong acids, Strong oxidizing agents

10.6 Hazardous decomposition products

The decomposition of fertilizer products may result in the generation of some or all of the following: ammonia, formaldehyde, biuret, chlorine, cyanic acid, and cyanide, and oxides of carbon, nitrogen, phosphorus, potassium, sulfur, and chlorine, and oxides of alkaline earth metals, and certain heavier metals used as nutrients in fertilizer products, such as copper, iron, manganese, and zinc, and other irritating and toxic fumes and gases.

SECTION 11: Toxicological information

Information on	toxicolog	gical effects
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Sulfuric acid, dipotassium salt (7778-80-5)	
LD50 Oral Rat	6600 mg/kg
Diammonium phosphate (7783-28-0)	
LD50 Oral Rat	6500 mg/kg
LD50 Dermal Rabbit	> 7950 mg/kg
Potassium chloride (7447-40-7)	
LD50 Oral Rat	2600 mg/kg
Monoammonium phosphate (7722-76-1)	
LD50 Oral Rat	5750 mg/kg
LD50 Dermal Rabbit	> 7940 mg/kg
Ammonium sulfate (7783-20-2)	
LD50 Oral Rat	2000 mg/kg
Sulfur (7704-34-9)	
LD50 Oral Rat	> 3000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat (mg/l)	> 9.23 mg/l/4h
Iron oxide (Fe2O3) (1309-37-1)	
LD50 Oral Rat	> 10000 mg/kg
Ferrous sulfate (7720-78-7)	
LD50 Oral Rat	237 mg/kg
Sodium chloride (7647-14-5)	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat (mg/l)	> 42 g/m³ (Exposure time: 1 h)
Potassium nitrate (7757-79-1)	
LD50 Oral Rat	3015 mg/kg
Bentonite (1302-78-9)	T
LD50 Oral Rat	> 5000 mg/kg
Manganese (7439-96-5)	T
ATE (Oral)	9000.000 mg/kg body weight
Urea, polymer with formaldehyde (9011-05-6)	

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LC50 Inhalation Rat (mg/l)	> 167 mg/m³ (Exposure time: 4 h)	
(S,S)-Dimethyl 2-(difluoromethyl)-4-(2-methyl propyl)-6-(trifluoromethyl)-3,5-pyridinedicarbothioate (97886-45-8)		
LC50 Inhalation Rat (mg/l)	> 6 g/m³ (Exposure time: 4 h)	
Urea (57-13-6)		
ATE (Oral)	8471.000 mg/kg	

Skin Corrosion/Irritation: Causes skin irritation.

Respiratory or Skin Sensitization: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

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Iron oxide (Fe2O3) (1309-37-1)	
IARC group	3
Saccharated iron oxide (8047-67-4)	
IARC group	3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Potential Adverse Human Health Effects and Symptoms: Harmful if swallowed.

Symptoms/Injuries After Inhalation: Irritating to the respiratory system and mucous membranes. May cause cancer by inhalation. May cause drowsiness or dizziness.

Symptoms/Injuries After Skin Contact: Causes skin irritation. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Swallowing a small quantity of this material will

result in serious health hazard.

Chronic Symptoms: May cause cancer.

Serious Eye Damage/Irritation: Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - General	: Harmful to aquatic life with long lasting effects.

⁷ 8-80-5)
653 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
890 mg/l (Exposure time: 48 h - Species: Daphnia magna)
2900 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
3550 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
26.5 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
24.8 - 29.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss
[flow-through])
1060 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
825 mg/l (Exposure time: 48 h - Species: Daphnia magna)
2500 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
750 - 1020 mg/l (Exposure time: 96 h - Species: Pimephales promelas
[static])
83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
5.2 (5.2 - 8.2) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
14 mg/l (Exposure time: 48 h - Species: Daphnia magna)

LC 50 Fish 2	32.2 (32.2 - 41.9) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow- through])
Sulfur (7704-34-9)	
LC50 Fish 1	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])
LC 50 Fish 2	14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Ferrous sulfate (7720-78-7)	
LC50 Fish 1	925 mg/l (Exposure time: 96 h - Species: Poecilia reticulata [static])
EC50 Daphnia 1	152 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	0.56 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 2	6.15 - 9.26 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Sodium chloride (7647-14-5)		
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis	
	macrochirus [flow- through])	
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC 50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])	
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna	
	[Static])	
Bentonite (1302-78-9)		
LC50 Fish 1	19000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])	
Magnesium sulfate (7487-88-9)		
LC50 Fish 1	2610 - 3080 mg/l (Exposure time: 96 h - Species: Pimephales promelas	
	[static])	
EC50 Daphnia 1	266.4 - 417.3 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	
EC50 Other Aquatic Organisms 1	2700 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)	
Urea (57-13-6)		
LC50 Fish 1	16200 - 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)	
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	

12.2. Persistence and Degradability

Persistence and Degradability	May cause long-term adverse effects in the environment. This product is
·	water soluble and eventually biodegrades into elemental nitrogen. Excess
	nitrogen and
	nitrates in a body of water will contribute to eutrophication with visible
	effects such as toxic algae bloom. Not established.

12.3. Bioaccumulative Potential

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Bioaccumulative Potential Not established.				
Diammonium phosphate (7783-28-0)				
BCF fish 1	(no bioaccumulation expected)			
Monoammonium phosphate (7722-76-1)				
BCF fish 1 (no bioaccumulation expected)				
Ammonium sulfate (7783-20-2)				
Log Pow	-5.1 (at 25 °C)			
Sodium chloride (7647-14-5)				
BCF fish 1	(no bioaccumulation)			
Urea (57-13-6)				
BCF fish 1	< 10			
Log Pow	-1.59 (at 25 °C)			

- 12.4. Mobility in Soil No additional information available
- 12.5. Other Adverse Effects

Other Information: Avoid release to the environment

SECTION 13: Disposal considerations

Disposal of the product

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. See product label for disposal instructions. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative the nearest EPA Regional Office for guidance.

Disposal of contaminated packaging

Non - refillable container. See product label for container disposal instructions.

Waste treatment

Consult federal, state/provincial and local regulations regarding the proper disposal of this material.

Sewage disposal

Prevent material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways.

SECTION 14: Transport information

14.1	UN Number	None	
14.2	UN Proper Shipping Name	None	
14.3	Transport hazard class(es)	None	
14.4	Packing group	None	
14.5	Environmental hazards	None	
14.6	Special precautions for user	None	
117	Transport in bulk according to Appear II of MADDOL	72/70 and the IDC Code	- 9

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code None

SECTION 15: Regulatory information

15.1 US Federal Regulations	
EPA TSCA Regulatory Flag	This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

Sulfuric_acid, dipotassium salt (7778-80-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Diammonium phosphate (7783-28-0)	No. 1990 Annual Control of the Contr
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Potassium chloride (7447-40-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Monoammonium phosphate (7722-76-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Ammonium sulfate (7783-20-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sulfur (7704-34-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Iron oxide (Fe2O3) (1309-37-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Ferrous sulfate (7720-78-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Manganese oxide (Mn3O4) (1317-35-7)	v.
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Sodium chloride (7647-14-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Magnesium oxide (MgO) (1309-48-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Limestone (1317-65-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Potassium nitrate (7757-79-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Bentonite (1302-78-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Manganese (7439-96-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SA	RA Section 313 (Specific
toxic chemical listings)	(
SARA Section 313 - Emission Reporting	1.0 %
Urea, polymer with formaldehyde (9011-05-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Magnesium sulfate (7487-88-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Urea (57-13-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
15.2 US State Regulations Potassium chloride (7447-40-7) U.S Texas - Effects Screening Levels - Long Term U.S Texas - Effects Screening Levels - Short Term Monoammonium phosphate (7722-76-1) U.S Texas - Effects Screening Levels - Long Term	
U.S Texas - Effects Screening Levels - Short Term Ammonium sulfate (7783-20-2)	

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- U.S. California SCAQMD Toxic Air Contaminants With Proposed Risk Values
- U.S. California Toxic Air Contaminant List (AB 1807,
- AB 2728) RTK U.S. Massachusetts Right To Know

List

- RTK U.S. Pennsylvania RTK (Right to Know) Environmental
- Hazard List RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Rhode Island Air Toxics Acceptable Ambient Levels 1-Hour
- U.S. Rhode Island Air Toxics Acceptable Ambient Levels Annual
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Sulfur (7704-34-9)

- RTK U.S. Massachusetts Right To Know List
- RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Mexico Air Quality Ambient Air Quality
- Standards RTK U.S. Pennsylvania RTK (Right to

Know) List

- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Iron oxide (Fe2O3) (1309-37-1)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits -
- TWAs RTK U.S. Massachusetts Right To

Know List

- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels
- (AALs) Annual RTK U.S. New Jersey Right to Know Hazardous Substance

List

- U.S. New York Occupational Exposure Limits TWAs
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Oregon Permissible Exposure Limits -
- TWAs RTK U.S. Pennsylvania RTK (Right

to Know) List

- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 25 Feet to Less Than 40 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 40 Feet to Less Than 75 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 75 Feet or Greater
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights Less Than 25 Feet

Ferrous sulfate (7720-78-7)

CENTRAL PROTURF Fertilizer with 0.42% Prodiamine Herbicide

- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Louisiana Reportable Quantity List for Pollutants
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 2
- U.S. Massachusetts Oil & Hazardous Material List Reportable Quantity
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 2 RTK U.S. Massachusetts Right To Know List
- U.S. Massachusetts Toxics Use Reduction Act
- U.S. Michigan Polluting Materials List
- U.S. New Jersey Discharge Prevention List of Hazardous Substances RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New York Reporting of Releases Part 597 List of Hazardous Substances RTK U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List RTK U.S. Pennsylvania RTK (Right to Know) List
- U:S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Manganese oxide (Mn3O4) (1317-35-7)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr) RTK U.S. Massachusetts Right To Know List
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. North Carolina Control of Toxic Air Pollutants RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

Sodium chloride (7647-14-5)

- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Magnesium oxide (MgO) (1309-48-4)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits TWAs RTK U.S. Massachusetts Right To Know List
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual RTK U.S.
- New Jersey Right to Know Hazardous Substance List
- U.S. New York Occupational Exposure Limits TWAs
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Oregon Permissible Exposure Limits TWAs RTK U.S. Pennsylvania RTK (Right to Know)

CENTRAL PROTURF Fertilizer with 0.42% Prodiamine Herbicide

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- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

Limestone (1317-65-3)

- U.S. Idaho Occupational Exposure Limits TWAs
- RTK U.S. Massachusetts Right To Know List
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Oregon Permissible Exposure Limits TWAs RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

Potassium nitrate (7757-79-1)

- RTK U.S. Massachusetts Right To Know List
- RTK U.S. New Jersey Right to Know Hazardous Substance List RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Bentonite (1302-78-9)

- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term

Manganese (7439-96-5)

- U.S. California SCAQMD Toxic Air Contaminants Non-Cancer Chronic
- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. Colorado Primary Drinking Water Regulations Secondary Maximum Contaminant Levels (SMCLs)
- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Florida Drinking Water Standards Secondary Maximum Contaminant Levels (SMCLs)
- U.S. Georgia Drinking Water Secondary Maximum Contaminant Levels (SMCLs)
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits Ceilings
- U.S. Illinois Toxic Air Contaminant Carcinogens
- U.S. Illinois Toxic Air Contaminants
- U.S. Louisiana Reportable Quantity List for Pollutants
- U.S. Maine- Air Pollutants Hazardous Air Pollutants
- U.S. Massachusetts Drinking Water Secondary Maximum Contaminant Levels (SMCLs) RTK U.S.
- Massachusetts Right To Know List
- U.S. Massachusetts Toxics Use Reduction Act

CENTRAL PROTURF Fertilizer with 0.42% Prodiamine Herbicide

- U.S. Michigan Occupational Exposure Limits STELs
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Chemicals of High Concern
- U.S. Minnesota Groundwater Health Risk Limits
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits STELs
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. Missouri Drinking Water Secondary Maximum Contaminant Levels (SMCLs)
- U.S. Nevada Drinking Water Secondary Maximum Contaminant Levels (SMCLs)
- U.S. New Hampshire Drinking Water Secondary Maximum Contaminant Levels (SMCLs)
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Environmental Hazardous Substances List RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Secondary Drinking Water Standards Recommended Upper Limits (RULs)
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New Jersey Water Quality Ground Water Quality Criteria
- U.S. New Jersey Water Quality Practical Quantitation Levels (PQLs)
- U.S. New Mexico Water Quality Standards for Ground Water of 10,000 mg/L TDS Concentration or Less
- U.S. New York Occupational Exposure Limits Ceilings
- U.S. North Carolina Control of Toxic Air Pollutants
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Oregon Permissible Exposure Limits Ceilings
- U.S. Pennsylvania Drinking Water Secondary Maximum Contaminant Levels (SMCLs) RTK U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Rhode Island Air Toxics Acceptable Ambient Levels 24-Hour
- U.S. Rhode Island Air Toxics Acceptable Ambient Levels Annual
- U.S. South Carolina Secondary Maximum Contaminant Levels (SMCLs)
- U.S. Tennessee Occupational Exposure Limits STELs
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Drinking Water Standards Secondary Constituent Levels (SCLs)
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Utah Drinking Water Secondary Maximum Contaminant Levels (SMCLs)
- U.S. Vermont Permissible Exposure Limits Ceilings
- U.S. Vermont Permissible Exposure Limits STELs
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Virginia Water Quality Standards Public Water Supply Effluent Limits
- U.S. Washington Permissible Exposure Limits Ceilings
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 25 Feet to Less Than 40 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 40 Feet to Less Than 75 Feet
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights 75 Feet or Greater
- U.S. Wisconsin Hazardous Air Contaminants All Sources Emissions From Stack Heights Less Than 25 Feet

Urea, polymer with formaldehyde (9011-05-6)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

Magnesium sulfate (7487-88-9)

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

Urea (57-13-6)

U.S. - Minnesota - Hazardous Substance List

U.S. - Texas - Effects Screening Levels - Long Term

U.S. - Texas - Effects Screening Levels - Short Term

SECTION 16: Other information

This safety data sheet was developed from safety data sheets of suppliers of the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or beyond its intended use. This information is based on our present knowledge and is provided according to the relevant national regulations.

16.1 Further information/disclaimer

This information is intended as a characterization of the product in order to provide guidance for the relevant safety issues. However, this document does not provide any warranty, expressed or implied, regarding the properties of the product. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and Ferti Technologies. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purposes.

16.2 Preparation information

The classification of the mixture was set based on the regulation (US) HazCom 1910.1200 [HCS 2012].



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Cool Power® Selective Herbicide

EPA Reg. No.:

228-317

Product Type:

Herbicide

Company Name:

Nufarm Americas Inc. 11901 S. Austin Avenue

Alsip, IL 60803 1-800-345-3330

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,

Call CHEMTREC Day or Night: 1-800-424-9300 For Medical Emergencies Only, Call 1-877-325-1840

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA label. Certain sections of this SDS are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.

2. HAZARDS IDENTIFICATION

PHYSICAL HAZARDS

Not hazardous

HEALTH HAZARDS:

Acute Toxicity Oral Category 4 Aspiration Hazard Category 1 Eye Irritation Category 2B

ENVIRONMENTAL HAZARDS:

Category 1 Hazardous to aquatic environment, acute Hazardous to aquatic environment, chronic Category 1

SIGNAL WORD:

DANGER

HAZARD STATEMENTS:

Harmful if swallowed. May be fatal if swallowed and enters airways. Causes eye irritation. Very toxic to aquatic life with long lasting effects.







PRECAUTIONARY STATEMENTS

Wash thoroughy after handling. Do not eat, drink, or smoke when using this product. Avoid release to the environement.

IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation presists: Get medical advice.

Collect spillage.

Dispose of contents in accordance with local, state, and federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NO.	% BY WEIGHT
2-methyl-4-chlorophenoxyacetic acid, isooctyl (2-ethylhexyl) ester	29450-45-1	54.4 - 57.8
Butoxyethanol Ester 3,5,6-Trichloro-2-Pyridinyloxyacetic Acid	64700-56-7	5.0 - 5.5
Dicamba Acid	1918-00-9	3.85 - 4.25
Distillates (Petroleum), Hydrotreated Light	64742-48-8	25.7 - 27.4
Other Ingredients	Trade Secret	Trade Secret

Synonyms: Mixture of MCPA, Triclopyr and Dicamba

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water. Remove contact lenses, if present, then continue rinsing eye. Get medical attention if irritation occurs and persists.

If Swallowed: DO NOT induce vomiting. Get immediate medical attention.

If Inhaled: Move person to fresh air. If breathing is difficult, administer oxygen. If symptoms develop, get medical advice.

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water. If irritation occurs, get medical advice.

Most important symptoms/effects, acute and delayed: Causes eye irritation. Harmful if swallowed. Aspiration hazard – may be fatal if swallowed and enter airways.

Indication of immediate medical attention and special treatment needed, if necessary: Get immediate medical attention for ingestion.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Recommended for large fires: foam or water spray. Recommended for small fires: dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Firefighters should wear NIOSH approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.

Unusual Fire and Explosion Hazards: If water is used to fight fire or cool containers, dike to prevent runoff contamination of municipal sewers and waterways.

Hazardous Decomposition Materials (Under Fire Conditions): May produce gases such as hydrogen chloride and oxides of nitrogen and carbon.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.

Methods for Cleanup and Disposal: Pump any free liquid into an appropriate closed container. Collect washings for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.

Other Information: Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

HANDLING:

Avoid contact with skin, eyes or clothing. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. If pesticide gets on skin, wash immediately with soap and water. Remove PPE immediately after handling this product. As soon as possible, wash thoroughly and change into clean clothing.

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STORAGE:

Always store pesticides in a secured warehouse or storage building. Containers should be opened in wellventilated area. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not store near open containers of fertilizer, seed or other pesticides. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls:

Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.

Personal Protective Equipment:

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemicalresistant gloves made of barrier laminate, nitrile rubber, neoprene rubber, or viton. An emergency shower or water supply should be readily accessible to the work area.

Respiratory Protection: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

Exposure Guidelines:

•	OSHA		ACGIH		
Component	TWA	STEL	TWA	STEL	Unit
MCPA 2-EHE	NE	NE	NE	NE	
Triclopyr BEE	NE	NE	NE	NE	
Dicamba	NE	NE	NE	NE	
Distillates (Petroleum), Hydrotreated Light	NE	NE	NE	NE	
Other Ingredients	NE	NE	NE	NE	

NE = Not Established

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Odor:

Odor threshold:

:Hq

Melting point/freezing point: Initial boiling point and boiling range

Flash point:

Evaporation rate: Flammability (solid, gas):

Upper/lower flammability or explosive limits: Vapor pressure:

Vapor density: Relative density:

Solubility(ies): Partition coefficient: n-octanol/water:

Decomposition temperature:

Viscosity: VOC Emission Potential (%):

Autoignition temperature:

Light Amber liquid

Aromatic hydrocarbon odor

No data available

2.73 (1% w/w dispersion in DIW)

No data available

No data available

>230° F (110° C) Tag Closed Cup No data available

No data available No data available

No data available

No data available 1.016 g/cc @ 25° C

Emulsifiable No data available

No data available No data available

17.59 cPs @ 25° C, 9.52 cPs @ 39° C

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Not reactive.

Chemical Stability: This material is stable under normal handling and storage conditions.

Possibility of Hazardous Reactions: Will not occur.

Conditions to Avoid: Excessive heat. Do not store near heat or flame. Incompatible Materials: Strong oxidizing agents: bases and acids.

Hazardous Decomposition Products: Under fire conditions may produce gases such as hydrogen chloride and

oxides of nitrogen and carbon.

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Inhalation, eye and skin contact.

Symptoms of Exposure:

Eye Contact: Causes eye irritation. Vapors and mists can cause irritation.

Skin Contact: Mildly irritating based on toxicity studies.

Ingestion: Harmful if ingested. May cause nausea, vomiting, abdominal pain, weakness of arms and/or legs, dizziness, loss of coordination. The petroleum hydrocarbon component, if aspirated into the respiratory system during ingestion or vomiting may cause mild or severe pulmonary injury, possibly progressing to death.

Inhalation: May cause upper respiratory tract irritation, coughing, wheezing, nausea, headache, depression. Overexposure to petroleum hydrocarbon component may cause irritation to respiratory tract, headaches, anesthesia, drowsiness, unconsciousness and other central nervous system effects, possibly including death.

Delayed, immediate and chronic effects of exposure: None reported.

Toxicological Data:

Data from laboratory studies on this product are summarized below:

Oral: Rat LD₅₀: 1,116 mg/kg Dermal: Rabbit LD₅₀: 3,752 mg/kg Inhalation: Rat 4-hr LC₅₀: >3.59 mg/l Eye Irritation: Rabbit: Moderately irritating Skin Irritation: Rabbit: Mildly irritating

Skin Sensitization: Not a contact sensitizer in guinea pigs following repeated skin exposure.

Subchronic (Target Organ) Effects: Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods. Excessive exposure to Triclopyr may cause liver or kidney effects. Repeated overexposure to dicamba may cause liver changes or a decrease in body weight.

Carcinogenicity / Chronic Health Effects: The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, newer rat and mouse lifetime feeding studies did not show carcinogenic potential for MCPA. Triclopyr did not cause cancer in laboratory studies. Dicamba did not cause cancer in long-term animals studies. The U.S. EPA has given triclopyr and dicamba a Class D classification (not classifiable as to human carcinogenicity).

Reproductive Toxicity: MCPA studies in laboratory animals have shown testicular effects and lower male fertility. For triclopyr, in laboratory animal studies, effects on reproduction have been seen only at doses that produced significant toxicity to the parent animals. Dicamba did not interfere with fertility in reproduction studies in laboratory animals.

Developmental Toxicity: MCPA studies in laboratory animals have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals. For triclopyr, birth defects are unlikely. Even exposures having an adverse effect on the mother should have no effect on the fetus. Animal tests with dicamba have not demonstrated developmental effects.

Genotoxicity: There have been some positive and some negative studies, but the weight of evidence is that MCPA is not mutagenic. Animal tests with triclopyr did not demonstrate mutagenic effects. Animal tests with dicamba did not demonstrate mutagenic effects.

Assessment Carcinogenicity:

This product contains substances that are considered to be probable or suspected human carcinogens as follows:

	Regulatory Agency Listing As Carcinogen			
Component	ACGIH	IARC	NTP	OSHA
Chlorophenoxy Herbicides (MCPA)	No	2B	No	No
Triclopyr BEE	No	No	No	No
Dicamba Acid	No	No	No	No

12	ECOL	OCICAL	INFORMATION

Ecotoxicity: Data on MCPA 2-EHE: 96-hour LC ₅₀ Bluegill: 96-hour LC ₅₀ Rainbow Trout: 48-hour EC ₅₀ Daphnia:	3.9 mg/l 3.2 mg/l 0.28 mg/l	Bobwhite Quail Dietary LC ₅₀ : >5,620 ppm Mallard Duck 8-day Dietary LC ₅₀ : >5,620 ppm
Data on Triclopyr BEE: 96-hour LC ₅₀ Bluegill: 96-hour LC ₅₀ Rainbow Trout: 48-hour EC ₅₀ Daphnia:	0.36 mg/l 0.65 mg/l 10.1 mg/l	Bobwhite Quail Oral LD ₅₀ : 735 mg/kg Bobwhite Quail 8-day Dietary LC ₅₀ : 5,401 ppm Mallard Duck 8-day Dietary LC ₅₀ : >5,401 ppm
Data on Dicamba:		
96-hour LC ₅₀ Bluegill:	135 mg/l	Bobwhite Quail 8-day Dietary LC ₅₀ : >10,000 ppm
96-hour LC ₅₀ Rainbow Trout:	135 mg/l	Mallard Duck 8-day Dietary LC ₅₀ : >10,000 ppm
48-hour EC ₅₀ Daphnia:	110 mg/l	48-hour Honey Bee Contact LD ₅₀ : >100 μg/bee

Environmental Fate:

MCPA 2-EHE is rapidly de-esterfied to parent MCPA acid in the environment. In soil, MCPA is microbially degraded with a typical half-life of approximately 10 to 14 days. In laboratory and field studies, Triclopyr BEE hydrolyzes to parent acid in the environment. Triclopyr is moderately persistent and mobile. In soil, the predominant degradation pathway is microbial and the average half-life is 30 days. Half-lives tend to be shorter in warm, moist soils with a high organic content. The predominant degradation pathway for triclopyr in water is photodegradation and the average half-life is one day. Initially, triclopyr BEE may bind to suspended organic particles or sediments in the water and while bound effectively lengthen the half-life in water. Dicamba has low bioaccumulation potential, is not persistent in soil, is highly mobile in soil and degrades rapidly.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

If container is damaged or if pesticide has leaked contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed labeled container for proper disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling and Disposal:

Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

Nonrefillable containers larger than 5 gallons: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. Triple rinse or pressure rinse container (or equivalent) promptly after emptying.

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty

SAFETY DATA SHEET

the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 psi for at least 30 seconds. Drain for 10 seconds after the flow begins to drip.

Refillable containers larger than 5 gallons: Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

14. TRANSPORTATION INFORMATION

Follow the precautions indicated in Section 7: HANDLING AND STORAGE of this SDS.

DOT:

< 119 gallons per complete package

Non Regulated

≥ 119 gallons per complete package

UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Triclopyr BEE), 9, III, Marine Pollutant

≥ 3,228 gallons per completed package

UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Dicamba), 9, III, RQ, Marine Pollutant

IMDG

UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Triclopyr BEE), 9, III, Marine Pollutant

IATA

UN 3082, Environmentally hazardous substance, liquid, n.o.s. (Triclopyr BEE), 9, III, Marine Pollutant

15. REGULATORY INFORMATION

EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

CAUTION. Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

U.S. FEDERAL REGULATIONS

TSCA Inventory: This product is exempted from TSCA because it is solely for FIFRA regulated use.

SARA Hazard Notification/Reporting:

Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370.66):

Acute Health

Section 313 Toxic Chemical(s):

Dicamba (CAS No. 1918-00-9), 3.85 - 4.25% by weight in product

Reportable Quantity (RQ) under U.S. CERCLA:

Dicamba (CAS No. 1918-00-9) 1,000 pounds

RCRA Waste Code:

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SAFETY DATA SHEET

Cool Power® Selective Herbicide

State Information:

Other state regulations may apply. Check individual state requirements.

California Proposition 65: Not Listed.

16. OTHER INFORMATION

National Fire Protection Association (NFPA) Hazard Rating:

Rating for this product: Health: 2 Flammability: 1 Reactivity: 0

Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

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