

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	MPROSIN
Version #	20
Revision date	12-06-2010
Product Use	Flame Retardant, adhesives, friction enhancer, Plastics Compounding
Chemical description	C18-28 Long Chain Chlorinated Paraffin Resin
CAS #	63449-39-8
Manufacturer information	DOVER CHEMICAL CORPORATION CHEMTREC (Outside the U.S.) 1-703-527-0585 CHEMTREC (U.S. and Canada) 1-800-424-9300

Supplier information
CHEMICAL STORE INC.
www.ChemicalStore.com
Tel: (973) 405-6248

2. Hazards Identification

Emergency overview	Health injuries are not known or expected under normal use. Product dust may be irritating to eyes, skin and respiratory system. Prolonged or repeated exposure increases the risk. Product may form explosive dust/air mixtures if high concentration of product dust is suspended in air. This product has no known eco-toxicological effects.
Potential health effects	
Routes of exposure	Eye contact Inhalation Ingestion
Eyes	Contact with eyes may cause irritation.
Skin	Prolonged and/or repeated skin contact may result in mild irritation or redness.
Inhalation	May cause irritation of respiratory tract.
Ingestion	Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.
Signs and symptoms	Repeated or prolonged exposure may cause irritation of eyes and skin.
Potential environmental effects	This material is not expected to be harmful to aquatic life. No special environmental precautions required.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

Composition comments	The manufacturer states that there is no known carcinogen at or above 0.1% in this product.
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4. First Aid Measures

First aid procedures	
Eye contact	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. If irritation persists get medical attention.
Skin contact	Wash with soap and water. Get medical attention if irritation develops or persists.
Inhalation	Move to fresh air. Get medical attention, if needed.
Ingestion	Have victim rinse mouth thoroughly with water. Do not induce vomiting without medical advice. If ingestion of a large amount does occur, seek medical attention.
Notes to physician	Treat symptomatically.
General advice	No hazards which require special first aid measures. If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties	Dusts at sufficient concentrations can form explosive mixtures with air.
Extinguishing media	
Suitable extinguishing media	Dry chemical, foam, water fog.
Unsuitable extinguishing media	high volume water jet
Protection of firefighters	
Specific hazards arising from the chemical	Irritating and toxic gases or fumes may be released during a fire.
Protective equipment and precautions for firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to cool unopened containers. Move containers from fire area if you can do it without risk.

6. Accidental Release Measures

Personal precautions	Use personal protective equipment. Ensure adequate ventilation. Do not touch or walk through spilled material. Keep unnecessary personnel away.
Environmental precautions	No special environmental precautions required. Prevent further leakage or spillage if safe to do so.
Methods for containment	Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Stop leak if you can do so without risk. Cover with plastic sheet to prevent spreading. If sweeping of a contaminated area is necessary, use a dust suppressant agent.
Methods for cleaning up	Wear appropriate protective equipment and clothing during clean-up. Attempt to reclaim the free product, if this is possible. Avoid the generation of dusts during clean-up. Cover powder spill with plastic sheet or tarp to minimize spreading. Vacuum or sweep up material and place in a disposal container.

7. Handling and Storage

Handling	Use care in handling/storage. Wear personal protective equipment. Provide appropriate exhaust ventilation at places where dust is formed. Do not handle or store near an open flame, heat or other sources of ignition. Avoid prolonged or repeated skin contact with this material. Wash hands after handling and before eating.
Storage	Use care in handling/storage. Keep away from heat, sparks, and flame. Store in a cool dry place. Keep container closed when not in use.

8. Exposure Controls/ Personal Protection

Exposure guidelines	Dust Standard - 15 mg/m ³ Exposure Limits for this product have not been established. Avoid repeated or prolonged exposure to vapor or mist without appropriate respiratory protection.
Engineering controls	Ventilation should effectively remove and prevent buildup of any vapor/mist/fume/dust generated from the handling of this product.
Personal protective equipment	
Eye / face protection	Safety glasses with side-shields.
Hand protection	Wear appropriate chemical resistant gloves.
Skin protection	Normal work clothing (long sleeved shirts and long pants) is recommended.
Respiratory protection	No personal respiratory protective equipment normally required. When dusts or thermal processing fumes are generated and ventilation is not sufficient to effectively remove them, appropriate NIOSH/MSHA approved respiratory protection must be provided. Dust safety masks are recommended when the dust concentration is more than 10 mg/m ³ .
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	powder flakes granular
Color	white

Odor	none
Physical state	Solid.
Melting point	221 - 248 OF (105 - 120 OC)
Flash point	392 OF (200 OC)
Specific gravity	1.6 @ 25 C
Solubility {water}	0.0066 mg/l @ 20 C
Molecular formula	UVCB

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions
Conditions to avoid	High temperatures. Dust explosion properties
Incompatible materials	strong oxidizing agents, reducing agents
Hazardous decomposition products	carbon oxides, Hydrogen chloride gas. Thermal decomposition can lead to release of irritating gases and vapors.
Possibility of hazardous reactions	Will not occur.

11. Toxicological Information

Routes of exposure	Eye contact Inhalation Ingestion
Oral toxicity	Acute: Rat - NOAEL: 1715 mg/kg/day
Subchronic toxicity	90 day, Rats, NOAEL: 900 mg/kg/day
Carcinogenicity	Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.
Mutagenicity	Rat 5000 mg/kg/day; Invivo cytogenetic evaluation by analysis of bone marrow did not product any increase in frequency of chromosome or chromatid abnormalities. Not clastogenic. Did not show mutagenic effects in animal experiments. No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Teratogenicity	No data available to indicate product or any components present at greater than 0.1% may cause birth defects.
Reproductivity	400 mg/kg/day, diet produced internal hemorrhaging in pups, NOAEL: 8 mg/kg/day
Epidemiology	No epidemiological data is available for this product.
Neurotoxicity	No data available for this product.
Local effects	Skin irritation: non-irritant Eye irritation: non-irritant Sensitation: non-sensitation
Synergistic materials	No data available for this product.
Further information	This product has no known adverse effect on human health.

12. Ecological Information

Ecotoxicological data						
Product	CAS #	Effect Level	Species	Value	Test Duration	Comments
MPROSIN	63449-39-8	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l	96.00 Hours	
		LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	> 300 mg/l	96.00 Hours	
Ecotoxicity	This product has no known eco-toxicological effects. This material is not expected to be harmful to aquatic life.					
Environmental effects	Ecological injuries are not known or expected under normal use. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.					
Persistence / degradability	Not readily biodegradable.					
Aquatic toxicity	Ecological injuries are not known or expected under normal use.					

13. Disposal Considerations

Waste codes	Waste codes should be assigned by the user based on the application for which the product was used.
Disposal instructions	This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Do not re-use empty containers.

14. Transport Information

DOT	Not regulated as hazardous goods.
TDG	Not regulated as hazardous goods.
IATA	Not regulated as hazardous goods.
IMDG	Not regulated as hazardous goods.

15. Regulatory Information

US federal regulations	All components are on the U.S. EPA TSCA Inventory List. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
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CERCLA {Superfund} reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 {SARA}

Hazard categories	Immediate Hazard - No Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country{ <i>s</i> } or region	Inventory name	On inventory { <i>yes/no</i> }*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

International regulations	The product does not need to be labelled in accordance with EC directives or respective national laws.
State regulations	This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

WHMIS status Non-controlled

16. Other Information

Recommended use Flame Retardant
Plastics Compounding

HMIS® ratings Health: 1
Flammability: 1
Physical hazard: 0
Personal protection: B

NFPA ratings Health: 1
Flammability: 1
Instability: 0

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

Issue date 12-06-2010

This data sheet contains changes from the previous version in section(s):
Composition / Information on Ingredients: Composition comments