

38000 1.00 US Current 03.07.1996

STREET STATE

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|---|-------------|----------|----------------|---------|----------------|
| 7 | CHEMICAL | PRODUCT | ANID | COMBAND | IDENTIFICATION |
| | OHLHHOAL | LICOPOCI | MIND | CUMPANT | IDENTIFICATION |
| | | | | | |

Product Code

Trade Name

Manufacturer/Supplier

Address

38000

MICROPOSIT THINNER TYPE P

Shipley Company 455 Forest St.

Marlborough, Massachusetts 01752

Phone Number

Emergency Phone Number

Chemtrec #

MSDS first issued MSDS data revised

Prepared By:

Local Sales Company

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(508-481-7950)

COMPOSITION/INFORMATION ON THE INGREDIENTS 2.

in your to direction

Component

to actides! Propylene glycol monomethyl ether acetate (108-

Min% 100.00

Max% EEC Classification

100.00 Irritant R10, R36

HAZARD IDENTIFICATION

Routes of Entry

Inhalation, ingestion, eye and skin contact, absorption.

Carcinogenic Status

Not considered carcinogenic by NTP, IARC and OSHA

Target Organs

- Nervous System - Skin - Eye - Liver - Kidney

Health Effects - Eyes

Liquid or vapor may cause pain, transient irritation and

superficial comeal effects.

Health Effects - Skin

Material may cause slight irritation on prolonged or repeated

contact. Repeated and/or prolonged contact may lead to: -

drowsiness - liver damage - kidney damage

Health Effects - Ingestion

A large dose may have the following effects: - drowsiness - liver damage - kidney damage

Health Effects - Inhalation

Exposure to vapor at high concentrations may have the

following effects:

irritation of nose, throat and respiratory tract
 liver damage

kidney damage

FIRST AID MEASURES

First Aid - Eyes

Immediately flush the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if

soreness or redness persists.

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Page 1 of 6

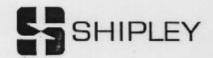


38000 1.00 US Current 03.07.1996

Page 2 of 6

| 4. | FIRST AID MEASURES (continued) | | | | |
|----|--|--|--|--|--|
| | First Aid - Skin | . Wash skin with water. Obtain medical attention if blistering occurs or redness persists. | | | |
| | First Aid - Ingestion | Wash out mouth with water. Obtain medical attention. | | | |
| | First Aid - Inhalation | Remove from exposure. If there is difficulty in breathing, giv oxygen. Seek medical attention if symptoms persist. | | | |
| • | Advice to Physicians | Treat symptomatically. | | | |
| 5. | FIRE FIGHTING MEASURES | | | | |
| | Extinguishing Media | Use water spray, foam, dry chemical or carbon dioxide. Keep containers and surroundings cool with water spray. | | | |
| | Special Fire-Fighting Procedures | This product may give rise to hazardous vapors in a fire. Vapors can travel a considerable distance to a source of ignition and result in flashback. | | | |
| | Unusual Fire & Explosion Hazards | Pressure may build up in closed containers with possible liberation of combustible vapors. | | | |
| | Protective Equipment for Fire- Fighting | Wear full protective clothing and self-contained breathing apparatus. | | | |
| 6. | ACCIDENTAL RELEASE MEASURES | | | | |
| | Spill Procedures | Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Finally flush area with plenty of water. | | | |
| | Personal Precautions | Wear appropriate protective clothing. Wear respiratory protection. Eliminate all sources of ignition. | | | |
| | Environmental Precautions | Prevent the material from entering drains or water courses. | | | |
| 7. | HANDLING AND STORAGE | | | | |
| | Handling | Use local exhaust ventilation. Avoid contact with eyes, skin and clothing. Keep container tightly closed when not in use. | | | |
| | Storage | Store in original containers. Store away from sources of hea or ignition. Storage area should be: - cool - dry - well ventilated - out of direct sunlight | | | |
| | Other | None known. | | | |

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38000 1.00 US Current 03.07.1996

8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Occupational Exposure Standards

Propylene glycol monomethyl ether acetate

An exposure limit of 100ppm is recommended.

Engineering Control Measures

Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (local exhaust), and control of process

conditions.

Respiratory Protection .

Respiratory protection if there is a risk of exposure to high vapor concentrations. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the

respirator.

Hand Protection

Butyl rubber gloves.

Eye Protection

Chemical goggles.

Body Protection

Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State Color Clear Sweet 966.0

Odor VOC (g/l)

966.0 0.966

Specific Gravity

Neutral 145.8/295

Boiling Range/Point (°C/F) Flash Point (PMCC) (°C/F)

46 / 114

Explosion Limits (%)

Lower limit 1.5 at 20 °C. Upper limit 7.0 at 20 C..

Solubility in Water Vapor Density (Air = 1) Insoluble. Heavier than air.

Evaporation Rate

Slower than ether

Vapor Pressure

Propylene Glycol Monomethyl Ether Acetate: 3.7 mmHg at

20 °C.

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Conditions to Avoid

- High temperatures - Static discharge

Incompatibilities

- Oxidizing agents

Hazardous Polymerization

Will not occur.

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Page 3 of 6

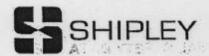


38000 1.00 US Current 03.07.1996

Page 4 of 6

| 10. | STABILITY AND REACTIVITY (continued) | | | | | |
|-----|---|--|--|--|--|--|
| | Hazardous Decomposition Products | None known. | | | | |
| 11. | TOXICOLOGICAL INFORMATION | | | | | |
| | Acute Data | Propylene Glycol Monomethyl Ether Acetate: Oral LD50 (rat) mg/kg. Dermal LD50 (rabbit) 5000mg/kg. | | | | |
| 12 | Chronic/Subchronic Data | No data. | | | | |
| | Genotoxicity | It was not mutagenic when tested in bacterial or mammalian systems. | | | | |
| | Reproductive/Developmental Toxicity | Developmental effects were seen in laboratory animals only at dose levels that were maternally toxic. | | | | |
| | Additional Data | None known. | | | | |
| 12. | ECOLOGICAL INFORMATION | | | | | |
| | Mobility | Propylene Glycol Monomethyl Ether Acetate: Koc is 0 - 50. | | | | |
| | Persistence/Degradability Bio-accumulation | The product is partially or slowly biodegradable. BOD20 greater than 40% No data. | | | | |
| | Ecotoxicity | The product is rated as practically non-toxic to aquatic species. Tests on the following species gave a LC50 of 161mg/litre: - fathead minnows Tests on the following species gave a LC50 of 408mg/litre: - daphnia | | | | |
| 13. | DISPOSAL CONSIDERATIONS | | | | | |
| | Product Disposal | Incineration is the recommended method of disposal. Dispose of in accordance with all applicable local and national regulations. | | | | |
| | Container Disposal | Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardou residues. Dispose of containers with care. | | | | |
| 14. | TRANSPORT INFORMATION | | | | | |
| | DOT Ground: UN Proper Shipping Name UN Class UN Number | Not Regulated per 49 CFR 173.150(f)(2) Flammable liquid, n.o.s. (3) Flammable Liquid UN1993 | | | | |

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38000 1.00 US Current 03.07.1996

14. TRANSPORT INFORMATION (continued)

UN Packaging Group

14 (万字) 13 D

N.O.S. 1:

Propylene Glycol Monomethyl Ether Acetate

N.O.S. 2:

Subsidiary Risks

None.

Emergency Response Guidebook

27

ADR/RID Substance Identification

CLASS 3 - 31(c)

Number

RQ

None:

Marine Pollutant

No.

15. REGULATORY INFORMATION

TSCA Listed

Yes

WHMIS Classification

D.2.B B.3

MA Right To Know Law

All components have been checked for inclusion on the Massachusetts Substance List (MSL). Those components present at the de minimus concentration have been identified

in the hazardous ingredients section of the MSDS.

California Proposition 65

This product does not contain materials which the State of California has found to cause cancer, birth defects or other

reproductive harm.

SARA TITLE III-Section 311/312

Categorization (40 CFR 370)

SARA TITLE III-Section 313 (40 **CFR 372)**

Immediate, delayed, flammability hazard

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

16. OTHER INFORMATION

NFPA Rating-FIRE

2

NFPA Rating-HEALTH

2

NFPA Rating-REACTIVITY

0

None.

NFPA Rating-SPECIAL

Revisions Highlighted

Abbreviations

CAS#: Chemical Abstract Services Number

ACGIH: American Conference of Governmental Industrial

Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit NTP: National Toxicology Program

IARC: International Agency for Research on Cancer

R: Risk

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Page 5 of 6



38000 1.00 US Current 03.07.1996

16. OTHER INFORMATION (continued)

S: Safety

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50% BOD: Biological Oxygen Demand

Koc: Soil Organic Carbon Partition Coefficient.

Disclaimer

The data contained herein is based on information that Shipley Company believes to be reliable, but no expressed or implied warranty is made with regard to the accuracy of such data or its suitability for a given situation. Such data relates only to the specific product described and not to such products in combination with any other product and no agent of Shipley Company is authorized to vary any of such data. Shipley Company and its agents disclaim all liability for any action taken or foregone on reliance upon such data.

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