

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name FLOW-MATE CLASSIC
Recommended Use Cleaning agent
Information on Manufacturer
 CERTIFIED LABS, DIV. OF NCH CORP.
 BOX 152170
 IRVING, TEXAS 75015

Product Code 0395
Chemical Nature Solvent mixture
Emergency Telephone Number 800-424-9300
 800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

WARNING

Combustible liquid and vapor
 Causes skin irritation
 Severe eye irritation
 May cause allergic skin reaction
 May be harmful if inhaled
 May cause allergic respiratory reaction
 May be harmful if swallowed

Color Yellow-orange **Physical State** Liquid **Odor** Citrus

Potential Health Effects

Principle Route of Exposure

Skin contact, Eye contact, Inhalation.

Primary Routes of Entry

Inhalation, Skin Absorption.

Acute Effects

Eyes

Severe irritation.

Skin

Causes skin irritation. May cause allergic skin reaction.

Inhalation

May cause irritation of respiratory tract. May cause allergic respiratory reaction. Inhalation may cause central nervous system effects. May cause central nervous system depression. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration hazard if swallowed - can enter lungs and cause damage. May be fatal if swallowed and enters airways.

Chronic Toxicity

Target Organ Effects

May cause sensitization by skin contact, May cause sensitization by inhalation, Liver and kidney injuries may occur. Central nervous system, Liver, Kidney, Bladder, Bone Marrow.

Aggravated Medical Conditions

Respiratory disorders, Skin disorders, Liver disorders, Kidney disorders, Neurological disorders.

Potential Environmental Effects

See Section 12 for additional Ecological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS-No
D-Limonene	5989-27-5
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	60828-78-6

4. FIRST AID MEASURES

General Advice

Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

Eye Contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately.

Skin Contact

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

Inhalation

Move to fresh air. In case of shortness of breath, give oxygen. If breathing has stopped, apply artificial respiration. Get medical attention immediately.

Ingestion

Drink 1 or 2 glasses of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Notes to Physician

May cause sensitization of susceptible persons. Aspiration hazard if swallowed - can enter lungs and cause damage.

5. FIRE-FIGHTING MEASURES

Flash Point 116°F/47°C

Method

Seta closed cup

Autoignition Temperature No information available.

Flammability Limits in Air % Solvent mixture.

Upper 6.1

Lower 0.7

Suitable Extinguishing Media

Foam. Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the chemical

Combustible Liquid. Solvent vapors are heavier than air and may spread along floors. Vapors may ignite and explode. Material can create slippery conditions.

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.

NFPA Health 2

Flammability 2

Instability 0

HMIS Health 2

Flammability 2

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Use personal protective equipment. Remove all sources of ignition. Ensure adequate ventilation. Prevent further leakage or spillage if

Environmental Precautions
Methods for Containment
Methods for Cleaning Up
Neutralizing Agent

safe to do so. Material can create slippery conditions.
 Do not flush into surface water or sanitary sewer system.
 Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
 Use clean non-sparking tools to collect absorbed material. Pick up and transfer to properly labeled containers.
 Not applicable.

7. HANDLING AND STORAGE

Handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists.

Storage

Keep away from open flames, hot surfaces and sources of ignition. Store in original container. Keep containers tightly closed in a dry cool and well-ventilated place.

Storage Temperature
Storage Conditions

Minimum 35°F/2°C
Indoor X **Outdoor** **Maximum Heated** 120°F/49°C **Refrigerated**

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH
D-Limonene	No data available	No data available	No data available
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	No data available	No data available	No data available

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment**Eye/Face Protection**

Goggles.

Skin Protection

Wear suitable protective clothing, Impervious gloves.

Respiratory Protection

In case of inadequate ventilation wear respiratory protection.

General Hygiene Considerations

Remove and wash contaminated clothing before re-use. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid	Viscosity	Non viscous
Color	Yellow-orange	Odor	Citrus
Appearance	Transparent	pH	Not applicable
Specific Gravity	0.841	Evaporation Rate	0.18 (Butyl acetate=1)
Percent Volatile (Volume)	99.9	VOC Content (%)	99.3
VOC Content (g/L)	853	Vapor Pressure	2.37 mmHg @ 70 °F
Vapor Density	3.9 (Air = 1.0)	Solubility	Partly soluble
Boiling Point/Range	348°F/176°C		

10. STABILITY AND REACTIVITY

Chemical Stability

Stable. Hazardous polymerization does not occur.

Conditions to Avoid

Keep away from open flames, hot surfaces, and sources of ignition

Incompatible Products

Strong oxidizing agents, Strong acids, Strong bases, Halogenated hydrocarbon, Rubber products.

Hazardous Decomposition Products

Carbon oxides, Aldehydes, Ketones, Organic acids.

Possibility of Hazardous Reactions

None under normal processing.

11. TOXICOLOGICAL INFORMATION

Product Information

No information available.

Component Information**Acute toxicity**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation	Draize Test	Other
D-Limonene	4400 mg/kg (Rat)	2000 mg/kg (Rabbit)	no data available	no data available	no data available
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	7460 µL/kg (Rat)	8480 µL/kg (Rabbit)	no data available	no data available	no data available

Chronic Toxicity

Component	Mutagenicity	Sensitization	Developmental Toxicity	Reproductive Toxicity	Target Organ Effects
D-Limonene	no data available	Skin sensitization, Respiratory sensitization	no data available	no data available	CNS, bone marrow, lungs, liver, kidneys
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	no data available	no data available	no data available	no data available	Bladder, Liver, Kidneys

Carcinogenicity

There are no known carcinogenic chemicals in this product.

Component	ACGIH	IARC	NTP	OSHA	Other
D-Limonene	not applicable	not applicable	not applicable	not applicable	not applicable
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	not applicable	not applicable	not applicable	not applicable	not applicable

12. ECOLOGICAL INFORMATION

Product Information No information available.

Component Information

Component	Toxicity to Algae	Toxicity to Fish	Microtox	Water Flea	log Pow
D-Limonene	no data available	LC50 0.619-0.796 mg/L Pimephales promelas 96 h LC50= 35 mg/L Oncorhynchus mykiss 96 h	no data available	no data available	N/A
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	no data available	no data available	no data available	no data available	N/A

Persistence and Degradability No information available.

Bioaccumulation No information available.

Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Product Disposal Dispose of in accordance with local regulations.

Container Disposal Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name Dipentene Solution
Hazard Class 3
UN-No UN2052
Packing Group III
Marine Pollutant Marine Pollutant.
Description UN2052, Dipentene Solution, 3, PG III (<119 gal Combustible exception may be used)

TDG

Proper shipping name Dipentene Solution
Hazard Class 3
UN-No UN2052
Packing Group III
Marine Pollutant Marine Pollutant.
Description Dipentene Solution,3,UN2052,PG III (<119 gals Combustible exception may be used)

ICAO

UN-No UN2052
Proper Shipping Name Dipentene
Hazard Class 3
Packing Group III
Shipping Description UN2052, Dipentene,3(P),PG III

IATA

UN-No UN2052
Proper Shipping Name Dipentene
Hazard Class 3
Packing Group III
ERG Code 3L
Shipping Description UN2052,Dipentene,3(P),PG III

IMDG/IMO

Proper Shipping Name Dipentene
Hazard Class 3
Subsidiary Hazard Class P
UN-No UN2052
Packing Group III
EmS No. F-E, S-E
Marine Pollutant Marine Pollutant
Shipping Description UN2052, Dipentene,3(P),PG III

15. REGULATORY INFORMATION

Inventories

TSCA Complies

DSL Complies

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard Yes	Chronic Health Hazard Yes	Fire Hazard Yes	Sudden Release of Pressure Hazard No	Reactive Hazard No
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CERCLA

Component	Hazardous Substances RQs	CERCLA EHS RQs
D-Limonene	Not applicable	Not applicable
2,6,8-Trimethyl-4-nonyloxy polyethylene oxyethanol	Not applicable	Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

B3 Combustible liquid, D2A Very toxic materials, D2B Toxic materials.



16. OTHER INFORMATION

Prepared By	Dan Hollas
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Reason for Revision	No information available.
Glossary	No information available.
List of References.	No information available.

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