

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Misco TMI04 Champ #1366

Other means of identification

SDS # Misco TMI04

UN/ID No UN3266

Recommended use of the chemical and restrictions on use

Recommended Use Heavy Duty Cleaner Degreaser.

Uses Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet

Supplier Address

Misco Industrial
109 Space Park N
Goodlettsville, TN 37072

Emergency Telephone Number

Company Phone Number 1-615-334-1861 (to reorder)
Emergency Telephone (24 hr) CHEMTREC 1-800-262-8200 (North America)
1-703-741-5500 (International)

2. HAZARDS IDENTIFICATION

Appearance Yellow liquid

Physical State Liquid

Odor Strong amine odor

Classification

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.
Suspected of causing cancer.



Precautionary Statements - Prevention

Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 Use personal protective equipment as required.
 Do not breathe dust/fume/gas/mist/vapors/spray.
 Wash face, hands and any exposed skin thoroughly after handling.

Precautionary Statements - Response

Immediately call a poison center or doctor/physician.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Immediately call a poison center or doctor/physician.
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 Wash contaminated clothing before reuse.
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 Immediately call a poison center or doctor/physician.
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Monoethanolamine	141-43-5	Proprietary
Dipropylene Glycol Monomethyl Ether (DPM)	34590-94-8	Proprietary
Potassium hydroxide	1310-58-3	Proprietary
Sodium metasilicate	6834-92-0	Proprietary
Diethanolamine	111-42-2	Proprietary

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	Immediately call a poison center or doctor/physician.
Eye Contact	Immediately flush with plenty of water for up to 15 minutes. Hold eyelids open during flushing. Immediately call a poison center or doctor/physician.
Skin Contact	Flush area with water while removing contaminated clothing. Follow by washing with soap and water. If irritation persists, call a physician or poison control center.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration if needed. Immediately call a poison center or doctor/physician.
Ingestion	Rinse mouth. Do not induce vomiting. Contains potassium hydroxide, glycol ethers and strong alkalis. Give plenty of water. Never give anything by mouth to a person who is unconscious or convulsing. Consult a physician or poison control center immediately.

Most important symptoms and effects

Symptoms	Causes severe skin burns and eye damage. Blindness may occur. Vapors or mists may cause damage to the upper respiratory tract and to the lung tissue.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Carbon dioxide (CO₂). Dry chemical. Water spray (fog). Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

In the presence of extreme heat, as in a fire, this product may react with active metals (e.g. aluminum, zinc, etc.) to release flammable hydrogen gas.

Hazardous Combustion Products When heated strongly, as in a fire, this product may produce carbon dioxide, carbon monoxide, and oxides of phosphorus.

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. All containers should be cooled with water to prevent vapor pressure build up.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Small spills: Spills up to one gallon may be diluted with plenty of water and flushed to sewage drain. Rinse area thoroughly. Large spills: Dike spill and collect on suitable absorbent. Place in corrosion resistant containers for disposal. Rinse area thoroughly.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Avoid contact with skin and eyes. Use with adequate ventilation. Avoid breathing vapors or mists.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials. Do not let the drums freeze as they may split or rupture.

Incompatible Materials Do not mix this product with other cleaning chemicals, especially strong acids and oxidizing agents such as bleach.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Monoethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³
Dipropylene Glycol Monomethyl Ether (DPM) 34590-94-8	STEL: 150 ppm TWA: 100 ppm S*	TWA: 100 ppm TWA: 600 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m ³ (vacated) S* S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m ³ STEL: 150 ppm STEL: 900 mg/m ³
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Sodium metasilicate 6834-92-0	2 mg/m ³	2 mg/m ³	-
Sodium Tripolyphosphate 7758-29-4	15 mg/m ³	15 mg/m ³	-
Diethanolamine 111-42-2	TWA: 1 mg/m ³ inhalable fraction and vapor S*	(vacated) TWA: 3 ppm (vacated) TWA: 15 mg/m ³	TWA: 3 ppm TWA: 15 mg/m ³
Sodium pyrophosphate 7722-88-5	-	(vacated) TWA: 5 mg/m ³	TWA: 5 mg/m ³

Appropriate engineering controls

Engineering Controls Mechanical ventilation recommended when handling in enclosed, tight spaces.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Safety goggles are recommended.

Skin and Body Protection Chemical resistant gloves are recommended.

Respiratory Protection Normally not required. Wear NIOSH approved respirator to avoid breathing mists.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Strong amine odor
Appearance	Yellow liquid	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	13-14	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C / 212 °F	
Flash Point	None	
Evaporation Rate	1	(Water = 1)
Flammability (Solid, Gas)	Liquid- Not applicable	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>

Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.08	(Water = 1)
Water Solubility	Completely soluble	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
VOC Content	<19%	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Do not mix this product with other cleaning chemicals, especially strong acids and oxidizing agents such as bleach.

Hazardous Decomposition Products

When strongly heated, as in a fire, this product may produce oxides of carbon and phosphorus.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Do not inhale.

Ingestion Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Monoethanolamine 141-43-5	= 1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1025 mg/kg (Rabbit)	-
Dipropylene Glycol Monomethyl Ether (DPM) 34590-94-8	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	-
Potassium hydroxide 1310-58-3	= 214 mg/kg (Rat)	-	-
Sodium metasilicate 6834-92-0	= 600 mg/kg (Rat)	-	-
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50

Sodium Tripolyphosphate 7758-29-4	= 3100 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
Sodium xylenesulfonate 1300-72-7	= 7200 mg/kg (Rat)	-	-
Tetrasodium EDTA 64-02-8	= 10 g/kg (Rat)	-	-
Diethanolamine 111-42-2	= 620 µL/kg (Rat)	= 7640 µL/kg (Rabbit)	-
Sodium pyrophosphate 7722-88-5	> 2000 mg/kg (Rat)	-	-
Sodium Sulfate 7757-82-6	> 10000 mg/kg (Rat)	-	-
Sodium Trimetaphosphate 7785-84-4	-	> 4640 mg/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/eye irritation Causes severe eye damage.

Carcinogenicity Suspected of causing cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Diethanolamine 111-42-2	A3	Group 2B		X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Numerical measures of toxicity

Not determined.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Not determined.

Persistence/Degradability

Not determined

Bioaccumulation

Not determined.

Mobility

Not determined.

Other Adverse Effects

Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	Toxic Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN3266
Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, ethanolamine)
Hazard Class	8
Packing Group	III

IATA

UN/ID No	UN3266
Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, ethanolamine)
Hazard Class	8
Packing Group	III

IMDG

UN/ID No	UN3266
Proper Shipping Name	Corrosive liquid, basic, inorganic, n.o.s. (potassium hydroxide, ethanolamine)
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Monoethanolamine	Present	X		Present		Present	X	Present	X	X
Dipropylene Glycol Monomethyl Ether (DPM)	Present	X		Present		Present	X	Present	X	X
Potassium hydroxide	Present	X		Present		Present	X	Present	X	X
Sodium metasilicate	Present	X		Present		Present	X	Present	X	X
Diethanolamine	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Diethanolamine 111-42-2	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Dipropylene Glycol Monomethyl Ether (DPM) - 34590-94-8	34590-94-8	7.76	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide	1000 lb			X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Diethanolamine - 111-42-2	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Monoethanolamine 141-43-5	X	X	X
Dipropylene Glycol Monomethyl Ether (DPM) 34590-94-8	X	X	X
Potassium hydroxide 1310-58-3	X	X	X
Diethanolamine 111-42-2	X	X	X
Sodium pyrophosphate 7722-88-5	X	X	X
Sodium Sulfate 7757-82-6		X	X
Sodium Trimetaphosphate 7785-84-4		X	X

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 3	Flammability 0	Physical Hazards 0	Personal Protection N+P

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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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. 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.

End of Safety Data Sheet