

1. Chemical Product and Company Identification

Material name	CIMTECH® 280 METALWORKING FLUID
Version #	01
Issue date	05-15-2015
CAS #	Mixture
MSDS Number	Not applicable
Recommended use	METALWORKING FLUID
Manufacturer	
Company name	CIMCOOL® Industrial Products LLC 3000 Disney Street Cincinnati, Ohio 45209
Telephone (General Information)	513-458-8100
Emergency telephone number	1-800-424-9300 (CHEMTREC)
Emergency telephone number (outside USA)	1-703-527-3887 (CHEMTREC)
Supplier	
Company name	Milacron Canada Corp.
Address	1175 Appleby Line Road, Unit B-1 Burlington Ontario L7L5H9 Canada
Telephone (General Information)	905-319-1919
Emergency telephone number (outside USA)	1-703-527-3887 (CHEMTREC)

2. Hazards Identification

Emergency overview	Irritating to eyes and skin. May cause an allergic skin reaction. May be corrosive to metals. Avoid prolonged contact with eyes, skin and clothing.
Potential health effects	
Routes of exposure	Eye contact. Skin contact. Inhalation. Ingestion.
Eyes	Causes eye irritation. Avoid contact with eyes.
Skin	May be harmful if absorbed through skin. May cause skin irritation. Do not get this material in contact with skin.
Inhalation	Prolonged inhalation may be harmful. May cause irritation of respiratory tract.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Signs and symptoms	Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause an allergic skin reaction. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Potential environmental effects	May cause long-term adverse effects in the environment.

3. Composition/Information on Ingredients

Components	CAS #	Percent
TRIETHANOLAMINE	102-71-6	10 - 30
MONOETHANOLAMINE	141-43-5	1 - 5
HEXAHYDRO-1,3,5-TRIS (2-HYDROXYETHYL)-S- TRIAZINE	4719-04-4	0.5 - 1.5
PELARGONIC ACID	112-05-0	0.5 - 1.5
Other components below reportable levels		60 - 100

4. FIRST AID MEASURES

First aid procedures

Inhalation

If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Skin contact

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye contact

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth thoroughly. Drink 1 or 2 glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel unwell.

General advice

Wash contaminated clothing before reuse. IF exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

5. FIRE FIGHTING MEASURES

Flammable properties

Not flammable by WHMIS criteria.

Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

Not applicable, non-combustible.

Protection of firefighters

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

Protective equipment for firefighters

Wear suitable protective equipment.

Fire fighting equipment/instructions

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

Specific methods

In the event of fire and/or explosion do not breathe fumes.

Explosion data

Sensitivity to static discharge

Not applicable.

Sensitivity to mechanical impact

Not applicable.

Hazardous combustion products

Smoke, fumes, oxides of nitrogen, and oxides of carbon

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground. Contact local authorities in case of spillage to drain/aquatic environment. Use appropriate containment to avoid environmental contamination.

Methods for containment

Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up

Should not be released into the environment. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.

Other information

Clean up in accordance with all applicable regulations.

7. HANDLING AND STORAGE**Handling**

Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not get in eyes, on skin, or on clothing. Avoid breathing mist or vapor. Avoid prolonged exposure. When using do not eat or drink. Do not use in areas without adequate ventilation. Wash thoroughly after handling. Avoid release to the environment.

Storage

To maintain product quality, do not store in heat or direct sunlight. Store in a closed container away from incompatible materials. Room temperature - normal conditions. Use care in handling/storage. Store away from incompatible materials (see Section 10 of the MSDS). Keep this material away from food, drink and animal feed. Do not allow material to freeze. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Occupational exposure limits****US. ACGIH Threshold Limit Values**

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
TRIETHANOLAMINE (CAS 102-71-6)	TWA	5 mg/m ³
MONOETHANOLAMINE (CAS 141-43-5)	TWA	3 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m ³
	TWA	6 ppm
TRIETHANOLAMINE (CAS 102-71-6)	TWA	7.5 mg/m ³
MONOETHANOLAMINE (CAS 141-43-5)	TWA	5 mg/m ³
	TWA	3 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
TRIETHANOLAMINE (CAS 102-71-6)	TWA	5 mg/m ³
MONOETHANOLAMINE (CAS 141-43-5)	TWA	3 ppm

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
TRIETHANOLAMINE (CAS 102-71-6)	TWA	5 mg/m ³
MONOETHANOLAMINE (CAS 141-43-5)	TWA	3 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
TRIETHANOLAMINE (CAS 102-71-6)	TWA	3.1 mg/m3
MONOETHANOLAMINE (CAS 141-43-5)	TWA	3 ppm
TRIETHANOLAMINE (CAS 102-71-6)	TWA	0.5 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m3
	TWA	6 ppm
	TWA	7.5 mg/m3
TRIETHANOLAMINE (CAS 102-71-6)	TWA	5 mg/m3
MONOETHANOLAMINE (CAS 141-43-5)	TWA	3 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	PEL	6 mg/m3
		3 ppm

Biological limit values

No biological exposure limits noted for the ingredient(s).

Engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ensure adequate ventilation, especially in confined areas. Eye wash fountain and emergency showers are recommended.

Personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles). Do not get in eyes. Eye wash fountain is recommended.

Skin protection

Wear suitable protective clothing and gloves.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Use protective gloves made of: Nitrile.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	CLEAR
Physical state	Liquid.
Form	Liquid.
Color	Not available.
Odor	CHEMICAL
Odor threshold	Not available.
pH	9.7
Vapor pressure	Not available.
Vapor density	Not available.
Boiling point	> 212 °F (> 100 °C)
Melting point/Freezing point	< 32 °F (< 0 °C)
Solubility (water)	100 % Water Miscible
Specific gravity	1.06
Relative density	Not available.
Flash point	Not Applicable

Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
Evaporation rate	Like water when diluted
Other data	
pH in aqueous solution	9.0 @ 5%
VOC ASTM D2369	3 %

10. Stability and Reactivity

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Heat, flames and sparks. Contact with incompatible materials.
Incompatible materials	Acids. Aluminum. Avoid contact with oxidizers or reducing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
Hazardous decomposition products	Smoke, fumes, oxides of nitrogen, and oxides of carbon
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Toxicological data

Components	Species	Test Results
MONOETHANOLAMINE (CAS 141-43-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	1025 mg/kg
<i>Oral</i>		
LD50	Guinea pig	620 mg/kg
	Mouse	700 mg/kg
	Rat	10.2 g/kg
PELARGONIC ACID (CAS 112-05-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg
<i>Oral</i>		
LD50	Mouse	15000 mg/kg
TRIETHANOLAMINE (CAS 102-71-6)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Guinea pig	5300 mg/kg
	Rat	8 g/kg

Acute effects	Expected to be a low hazard for usual industrial or commercial handling by trained personnel.
Sensitization	May cause sensitization by skin contact.
Chronic effects	May be harmful if absorbed through skin. Prolonged inhalation may be harmful.
	Prolonged or repeated exposure may cause liver and kidney damage. These effects have not been observed in humans.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

TRIETHANOLAMINE (CAS 102-71-6)

3 Not classifiable as to carcinogenicity to humans.

Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation. Defatting, drying and cracking of skin.
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation.
Mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Reproductive effects	This product is not expected to cause reproductive or developmental effects.
Teratogenicity	Not classified.
Synergistic materials	Not applicable.

12. ECOLOGICAL INFORMATION

Ecotoxicological data

Components		Species	Test Results
MONOETHANOLAMINE (CAS 141-43-5)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	114 - 196 mg/l, 96 hours
PELARGONIC ACID (CAS 112-05-0)			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	96 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	91 mg/l, 96 hours
TRIETHANOLAMINE (CAS 102-71-6)			
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	565.2 - 658.3 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	10610 - 13010 mg/l, 96 hours
Ecotoxicity	Contains a substance which causes risk of hazardous effects to the environment.		
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.		
Aquatic toxicity	Not available.		
Persistence and degradability	Not available.		
Partition coefficient			
MONOETHANOLAMINE		-1.31	
PELARGONIC ACID		3.42	
TRIETHANOLAMINE		-1	
Mobility in environmental media	This product is miscible in water.		

13. DISPOSAL CONSIDERATIONS

Disposal instructions	Consult authorities before disposal. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport Information

TDG

UN number	UN3267
UN proper shipping name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (TRIETHANOLAMINE, MONOETHANOLAMINE)
Transport hazard class(es)	
Class	8

Subsidiary risk -
Packing group III
Environmental hazards Not available.
Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.
 Supplemental Information: Canadian TDG regulations may have criteria that would allow this material to be shipped as "Non-regulated" in some instances. To make that determination please refer to the regulations.

IATA

UN number UN3267
UN proper shipping name Corrosive liquid, basic, organic, n.o.s. (TRIETHANOLAMINE, MONOETHANOLAMINE)
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group III
Environmental hazards No.
ERG Code 8L
Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed.
Cargo aircraft only Allowed.

IMDG

UN number UN3267
UN proper shipping name CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (TRIETHANOLAMINE, MONOETHANOLAMINE)
Transport hazard class(es)
Class 8
Subsidiary risk -
Packing group III
Environmental hazards
Marine pollutant No.
EmS F-A, S-B
Special precautions for user Read safety instructions, MSDS and emergency procedures before handling.

IATA; IMDG; TDG



15. REGULATORY INFORMATION

Canadian regulations This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status Controlled

WHMIS classification D2B - Other Toxic Effects-TOXIC
 E - Corrosive

WHMIS labeling



International Inventories

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
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)

16. OTHER INFORMATION

HMIS® ratings

Health: 1
 Flammability: 0
 Physical hazard: 0

NFPA ratings

Health: 1
 Flammability: 0
 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 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.

Prepared by

Ann Ball
 513-458-8100

This data sheet contains changes from the previous version in section(s):

This document has undergone significant changes and should be reviewed in its entirety.