



# SAFETY DATA SHEET

## 1. Identification

Product identifier	<b>CIMSTAR® 540</b> METALWORKING FLUID
Other means of identification	
SDS number	Not applicable
Product code	B00045
Recommended use	METALWORKING FLUID
Recommended restrictions	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	

### 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)

### Supplier

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.
<b>Health hazards</b>	Not classified.
<b>Environmental hazards</b>	Not classified.

### Label elements

**Hazard symbol** None.  
**Signal word** None.  
**Hazard statement** The mixture does not meet the criteria for classification.

### Precautionary statement

**Prevention** Observe good industrial hygiene practices.  
**Response** Wash hands after handling.  
**Storage** Store away from incompatible materials.  
**Disposal** Dispose of waste and residues in accordance with local authority requirements. Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other hazards

Supplemental information      None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES		64742-52-5	≤10
MONOETHANOLAMINE		141-43-5	≤5
MONOISOPROPANOLAMINE		78-96-6	≤5
Other components below reportable levels			≤95

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

#### Inhalation

Move to fresh air. 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

Rinse with water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

#### Eye contact

Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

#### Ingestion

Rinse mouth. Drink 1 or 2 glasses of water. 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.

#### Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

#### Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

#### General information

If exposed or concerned: Get medical advice/attention. Show this safety data sheet to the doctor in attendance.

### 5. Fire-fighting measures

#### Suitable extinguishing media

Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

#### Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed.

#### Special protective equipment and precautions 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

Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.

#### General fire hazards

No unusual fire or explosion hazards noted.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**

Local authorities should be advised if significant spillages cannot be contained. This product is miscible in water. Clean up in accordance with all applicable regulations.

**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.

**Environmental precautions**

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

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

**7. Handling and storage****Precautions for safe handling****Conditions for safe storage, including any incompatibilities**

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 prolonged exposure.

Store in original tightly closed container. Do not allow material to freeze. Store away from incompatible materials (see Section 10 of the SDS). If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use.

**8. Exposure controls/personal protection****Occupational exposure limits****ACGIH**

	Type	Value
SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)	TWA	5 mg/m3

**US. ACGIH Threshold Limit Values**

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm

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

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

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

	Type	Value
MONOETHANOLAMINE (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm

MONOETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m <sup>3</sup>
	TWA	6 ppm 7.5 mg/m <sup>3</sup> 3 ppm
	No biological exposure limits noted for the ingredient(s).	
<b>Biological limit values</b>		
<b>Appropriate engineering controls</b>	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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.	
<b>Individual protection measures, such as personal protective equipment</b>		
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles). Avoid contact with eyes. Eye wash fountain is recommended.	
<b>Skin protection</b>		
<b>Hand protection</b>	Use protective gloves made of: Nitrile.	
<b>Other</b>	Wear suitable protective clothing.	
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment.	
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.	
<b>General hygiene considerations</b>	When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	

## 9. Physical and chemical properties

**Appearance** CLEAR

**Physical state** Liquid.

**Form** Liquid.

**Color** Not available.

**Odor** CHEMICAL

**Odor threshold** Not available.

**pH** 10.1

**Melting point/freezing point** < 30 °F (< -1.1 °C)

**Initial boiling point and boiling range** > 212 °F (> 100 °C)

**Flash point** Not Applicable

**Evaporation rate** Like water when diluted

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** Not available.

**Vapor density** Not available.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** 100 % Water Miscible

**Partition coefficient (n-octanol/water)** Not available.

<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>pH in aqueous solution</b>	8.8 @ 5%
<b>Specific gravity</b>	1.030

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, flames and sparks. Contact with incompatible materials.
<b>Incompatible materials</b>	Acids. Oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
<b>Hazardous decomposition products</b>	Smoke, fumes, oxides of nitrogen, and oxides of carbon

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Not classified.
<b>Skin contact</b>	Not classified.
<b>Eye contact</b>	Not classified.
<b>Ingestion</b>	Not classified.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Defatting of the skin. Direct contact with eyes may cause temporary irritation.

### Information on toxicological effects

<b>Acute toxicity</b>	Based on available data, the classification criteria are not met.
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<b>Components</b>	<b>Species</b>	<b>Test Results</b>
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MONOETHANOLAMINE (CAS 141-43-5)

<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	1025 mg/kg
<b>Oral</b>		
LD50	Guinea pig	620 mg/kg
	Mouse	700 mg/kg
	Rat	10.2 g/kg

MONOISOPROPANOLAMINE (CAS 78-96-6)

<b>Acute</b>		
<b>Dermal</b>		
<i>Liquid</i>		
LD50	Rabbit	1576 mg/kg
<b>Inhalation</b>		
<i>Mist</i>		
LC0	Rat	1005 mg/m <sup>3</sup> , 3 hours
<b>Oral</b>		
<i>Liquid</i>		
LD50	Rat	2813 mg/kg

Components	Species	Test Results
SEVERELY HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)		
<b>Acute</b>		
<b>Dermal</b>		
<i>Liquid</i>		
LD50	Rabbit	> 5000 mg/kg
<b>Inhalation</b>		
<i>Mist</i>		
LC50	Rat	> 5 mg/l, 4 hours
<b>Oral</b>		
<i>Liquid</i>		
LD50	Rat	> 5000 mg/kg
* Estimates for product may be based on additional component data not shown.		
<b>Skin corrosion/irritation</b>	Not classified.	
<b>Serious eye damage/eye irritation</b>	Not classified.	
<b>Corneal opacity value</b>	0.0000	
<b>Iris lesion value</b>	0.0000	
<b>Conjunctival reddening value</b>	0.4440	
<b>Conjunctival oedema value</b>	0.1110	
<b>Recover days</b>	3	
<b>Respiratory or skin sensitization</b>		
<b>Canada - Alberta OELs: Irritant</b>		
	MONOETHANOLAMINE (CAS 141-43-5)	Irritant
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	
<b>Specific target organ toxicity - single exposure</b>	Not classified.	
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.	
<b>Aspiration hazard</b>	Not an aspiration hazard.	
<b>Chronic effects</b>	Not classified.	
<b>Further information</b>	The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.	

## 12. Ecological information

Ecotoxicity	Contains a substance which causes risk of hazardous effects to the environment.	
Components	Species	Test Results
MONOETHANOLAMINE (CAS 141-43-5)		
<b>Aquatic</b>		
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)
MONOISOPROPANOLAMINE (CAS 78-96-6)		
<b>Aquatic</b>		
Fish	LC50	Goldfish (Carassius auratus)
114 - 196 mg/l, 96 hours		
210 mg/l, 96 hours		

Components	Species	Test Results
Acute Crustacea	EC50 Daphnia	109 mg/l, 48 hours
SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)		
Aquatic Acute Crustacea	EC50 Daphnia	> 1000 mg/l, 48 hours
Fish	LC50 Fathead minnow (Pimephales promelas)	> 30000 mg/l, 96 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

MONOETHANOLAMINE	-1.31
MONOISOPROPANOLAMINE	-0.93

**Mobility in soil**

This product is miscible in water.

**Other adverse effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code**

The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**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**

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

**TDG**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not established.

## 15. Regulatory information

**Canadian regulations**

**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**International regulations**

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

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

07-21-2016

**Version #**

01

**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.

**Revision information**

Product and Company Identification: Product and Company Identification  
Hazards Identification: US Hazard Categories  
Composition / Information on Ingredients: Ingredients  
Physical & Chemical Properties: Multiple Properties  
Transport Information: Proper Shipping Name/Packing Group  
Regulatory Information: United States  
Material Attributes & Uses; Experimental Data: Product Uses  
HazReg Data: North America  
GHS: Classification