SAFETY DATA SHEET

1. Identification

Product identifier CIMPERIAL® 16EP-HFP with FACT™

METALWORKING FLUID

Other means of identification

SDS number Not applicable B01016 **Product code**

Recommended use METALWORKING FLUID

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name CIMCOOL® Industrial Products LLC

> 3000 Disney Street Cincinnati, Ohio 45209

Telephone (General

Information)

Emergency telephone

number

Emergency telephone

number (outside USA)

513-458-8100

905-319-1919

1-800-424-9300 (CHEMTREC)

1-703-527-3887 (CHEMTREC)

Supplier

Milacron Canada Corp. Company name

1175 Appleby Line Road, Unit B-1 **Address**

Burlington Ontario L7L5H9 Canada

Telephone (General

Information)

Emergency telephone

number (outside USA)

1-703-527-3887 (CHEMTREC)

Supplier Not available.

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Serious eye irritation Category 2

> Sensitization, skin Category 1

Reproductive toxicity Effects on or via lactation

Not classified. **Environmental hazards**

Label elements



Signal word Warning

Hazard statement May cause an allergic skin reaction. Causes serious eye irritation. May cause harm to breast-fed

children.

Material name: CIMPERIAL® 16EP-HFP with FACT™ SDS Canada 1 / 10 **Precautionary statement**

Prevention Obtain special instructions before use. Do not breathe mist or vapor. Avoid contact during

pregnancy and while nursing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear

eye protection/face protection. Wear protective gloves.

IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical Response

advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical

advice/attention. IF exposed or concerned: Get medical advice/attention. Take off contaminated

clothing and wash it before reuse.

Store away from incompatible materials. Storage

Dispose of contents/container in accordance with local/regional/national/international regulations. **Disposal**

Other hazards None known.

Supplemental information The classified hazards shown on this SDS are associated with the product concentrate. These

hazards are not expected under recommended use conditions and dilution.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES		64742-52-5	≤70
C14-C17 MEDIUM CHAIN CHLORINATED PARAFFIN		63449-39-8	≤30
HEXAHYDRO-1,3,5-TRIS (2-HYDROXYETHYL)-S- TRIAZINE		4719-04-4	≤5
TRIETHANOLAMINE		102-71-6	≤5
MONOETHANOLAMINE		141-43-5	≤3
ALKOXYLATED LINEAR ALCOHOLS		68987-81-5	≤1.5
Other components below reportable	levels		≤40

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.

Rinse with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated Skin contact

clothing 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.

Rinse mouth. Drink 1 or 2 glasses of water. Do not induce vomiting. If vomiting occurs, keep head Ingestion

low so that stomach content doesn't get into the lungs. Get medical advice/attention if you feel

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. May cause allergic skin reaction.

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

Foam. Dry chemicals. Carbon dioxide (CO2). Use extinguishing measures that are appropriate to Suitable extinguishing media

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.

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Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions Wear suitable protective equipment.

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

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. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. 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 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. Prevent entry into waterways, sewer, basements or confined areas. 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. 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. For waste disposal, see section 13 of the SDS.

Environmental precautions

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

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage. including any incompatibilities Keep away from heat and sources of ignition. 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

	Туре	Value
SEVERELY-HYDROTREAT ED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5) US. ACGIH Threshold Limit Values	TWA	5 mg/m3
	Туре	Value
MONOETHANOLAMINE (CAS 141-43-5)	Type STEL	6 ppm

Material name: CIMPERIAL® 16EP-HFP with FACT™

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2	Canada. Alberta OELs	Occupational Health & Safety	y Code, Schedule 1, Table 2
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	Туре	Value	
MONOETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m3	
		6 ppm	
	TWA	7.5 mg/m3	
TRIETHANOLAMINE (CAS 102-71-6)	TWA	5 mg/m3	
MONOETHANOLAMINE (CAS 141-43-5)	TWA	3 ppm	

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

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

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

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

	Туре	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)

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

Biological limit values

Appropriate 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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

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

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

recommended.

Skin protection

Hand protection Use protective gloves made of: Nitrile.

Other Wear suitable protective clothing.

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Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

When using, do not eat, drink or smoke. Do not get in eyes, on skin, on clothing. Always observe General hygiene good personal hygiene measures, such as washing after handling the material and before eating, considerations

drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove

contaminants.

9. Physical and chemical properties

CLEAR Appearance Liquid. Physical state Liquid. **Form** Color Not available.

Odor **CHEMICAL Odor threshold** Not available. Not Applicable Not available. Melting point/freezing point Initial boiling point and boiling Not Applicable

range

360 °F (182.2 °C) Cleveland Open Cup Flash point

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.

Not available.

(%)

Not available. Explosive limit - lower (%) Explosive limit - upper (%) Not available. Vapor pressure Not available. Not available. Vapor density Not available. Relative density

Solubility(ies)

100 % Water Miscible Solubility (water)

Partition coefficient

(n-octanol/water)

Not available. **Auto-ignition temperature Decomposition temperature** Not available. Not available.

Other information

Viscosity

Explosive properties Not explosive. Combustible IIIB Flash point class Oxidizing properties Not oxidizing. 8.8 @ 5% pH in aqueous solution 1.006 Specific gravity

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Heat, flames and sparks. Contact with incompatible materials.

Acids. Oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form Incompatible materials

cancer causing nitrosamines.

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Version #: 01 Issue date: 09-02-2016 **Hazardous decomposition** products

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

11. Toxicological information

Information on likely routes of exposure

Inhalation Not classified.

Skin contact May cause an allergic skin reaction.

Eve contact Causes eye irritation.

Ingestion Not classified.

Symptoms related to the

physical, chemical and

toxicological characteristics Direct contact with eyes may cause temporary irritation. Symptoms may include stinging, tearing,

redness, swelling, and blurred vision. May cause an allergic skin reaction.

Information on toxicological effects

Acute toxicity May cause an allergic skin reaction.

Components **Species Test Results**

ALKOXYLATED LINEAR ALCOHOLS (CAS 68987-81-5)

Acute Dermal

Liquid

LD50 Rabbit > 2000 mg/kg

Inhalation

Mist

LD50 Rat > 50 mg/l, 4 hours

Oral

Liquid

LD50 Rat 2380 - 2745 mg/kg

MONOETHANOLAMINE (CAS 141-43-5)

Acute

Dermal

LD50 Rabbit 1025 mg/kg

Oral

LD50 Guinea pig 620 mg/kg

> Mouse 700 mg/kg 10.2 g/kg Rat

SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)

Acute

Dermal

Liquid

> 5000 mg/kg LD50 Rabbit

Inhalation

Mist

LC50 Rat

> 5 mg/l, 4 hours

Oral

Liquid

LD50 Rat > 5000 mg/kg

TRIETHANOLAMINE (CAS 102-71-6)

Acute

Dermal

Liquid

LD50 Rabbit > 2000 mg/kg

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Components	Species	Test Results
Oral		
LD50	Guinea pig	5300 mg/kg
Liquid		
LD50	Rat	4190 mg/kg

^{*} Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Not classified.

Serious eve damage/eve Causes eye irritation.

irritation

Respiratory or skin sensitization Canada - Alberta OELs: Irritant

> MONOETHANOLAMINE (CAS 141-43-5) Irritant TRIETHANOLAMINE (CAS 102-71-6) Irritant

Canada - Quebec OELs: Sensitizer

TRIETHANOLAMINE (CAS 102-71-6) Sensitizer.

Not classified.

Not classified.

Respiratory sensitization Not a respiratory sensitizer.

May cause sensitization by skin contact. Skin sensitization

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

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

IARC Monographs. Overall Evaluation of Carcinogenicity

TRIETHANOLAMINE (CAS 102-71-6) 3 Not classifiable as to carcinogenicity to humans.

May cause harm to breastfed babies. Reproductive toxicity

Specific target organ

toxicity - single exposure

Specific target organ

toxicity - repeated

exposure

Aspiration hazard Not an aspiration hazard.

Not classified. **Chronic effects**

Further information The classification for health and environmental hazards is derived by a combination of calculation

methods and test data, if available,

12. Ecological information

Contains a substance which causes risk of hazardous effects to the environment. **Ecotoxicity**

Test Results Components

ALKOXYLATED LINEAR ALCOHOLS (CAS 68987-81-5)

Aquatic

Acute

Crustacea EC50 Daphnia 1 - 10 mg/l, 48 hours Fish LC50 Pimephales promelas 1 - 10 mg/l, 96 hours

C14-C17 MEDIUM CHAIN CHLORINATED PARAFFIN (CAS 63449-39-8)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) > 0.1 mg/l, 96 hours

MONOETHANOLAMINE (CAS 141-43-5)

Aquatic

Fish LC50 Rainbow trout, donaldson trout 114 - 196 mg/l, 96 hours

(Oncorhynchus mykiss)

SEVERELY-HYDROTREATED NAPHTHENIC PETROLEUM DISTILLATES (CAS 64742-52-5)

Aquatic

Acute

Crustacea EC50 Daphnia > 1000 mg/l, 48 hours

Material name: CIMPERIAL® 16EP-HFP with FACT™

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Test Results Components **Species** LC50 Fathead minnow (Pimephales promelas) > 30000 mg/l, 96 hours Fish

TRIETHANOLAMINE (CAS 102-71-6)

Aquatic

Crustacea EC50 Water flea (Ceriodaphnia dubia) 565.2 - 658.3 mg/l, 48 hours Fathead minnow (Pimephales promelas) 10610 - 13010 mg/l, 96 hours Fish LC50

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

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ALKOXYLATED LINEAR ALCOHOLS 3.01 MONOETHANOLAMINE -1.31 **TRIETHANOLAMINE** -1

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. Dispose of

contents/container in accordance with local/regional/national/international regulations.

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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

TDG

UN number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (C14-C17 MEDIUM CHAIN

CHLORINATED PARAFFIN), MARINE POLLUTANT

Transport hazard class(es)

Class 9 Subsidiary risk Ш Packing group **Environmental hazards** Yes

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IATA

UN number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s. (C14-C17 MEDIUM CHAIN CHLORINATED

PARAFFIN)

Transport hazard class(es)

Class 9 Subsidiary risk Ш Packing group **Environmental hazards** Yes **ERG Code** 9L

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only Allowed with restrictions.

IMDG

UN number UN3082

^{*} Estimates for product may be based on additional component data not shown.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (C14-C17 MEDIUM CHAIN **UN** proper shipping name CHLORINATED PARAFFIN), MARINE POLLUTANT

Transport hazard class(es)

9 Class Subsidiary risk Ш **Packing group**

Environmental hazards Marine pollutant Yes

EmS F-A, S-F

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Not established.

Transport in bulk according to Annex II of MARPOL 73/78 and

the IBC Code

IATA; IMDG; TDG



Marine pollutant



IMDG Regulated Marine Pollutant. **General information**

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.

Material name: CIMPERIAL® 16EP-HFP with FACT™

International Inventories

Country(s) or region	Inventory name	On inventory or exempt (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
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	No
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 09-02-2016

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: Pacific Rim GHS: Classification

Material name: CIMPERIAL® 16EP-HFP with FACT™
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