

# MATERIAL SAFETY DATA SHEET

## CIMPERIAL<sup>®</sup> 1070

### METALWORKING FLUID CONCENTRATE

MSDS: 061

FS: 5-Apr-01: 10347: 1787

DATE EFFECTIVE: 4/5/01

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Manufacturer:</b>  Consumable Products Division  Milacron Marketing Company  3000 Disney Street  Cincinnati, Ohio 45209	<b>Emergency Telephone Number:</b> 1-513-841-8181  <b>Information Telephone Number:</b> 1-513-458-8199  <b>Generic Name:</b> Water Soluble Metalworking Fluid Concentrate  <b>Product Name(s) &amp; Code(s):</b> CIMPERIAL <sup>®</sup> 1070 BLUE 061; CIMPERIAL <sup>®</sup> 1070 UNDYED 102;
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#### 2. EMERGENCY INFORMATION

Product is alkaline. Product is a primary eye irritant. Product is combustible. Highway spills could result in slippery conditions. No other significant health effects are associated with this material.

#### 3. POTENTIAL HEALTH EFFECTS OF DIRECT EXPOSURE

	Product Concentrate	Product at Use Dilution
<b>Inhalation</b>	Not Applicable.	Extended Exposure to mists may cause upper respiratory irritation.
<b>Eye Contact</b>	Product is a primary eye irritant.	Will cause stinging sensation in the eye.
<b>Skin Contact</b>	Product is not a primary skin irritant.	Not irritating to the skin when used as directed and good personal hygiene is practiced.
<b>Ingestion</b>	Not orally toxic.	Swallowing small quantities may cause nausea or diarrhea.

When used in applications generating high levels of mist, operator exposure can be minimized by proper ventilation, use of mist collectors or splash guards, as appropriate. If there is doubt about

actual mist levels present, monitoring should be conducted.

Mild skin irritation (redness and dryness of hands) may be experienced when the diluted product has been contaminated by certain oils by dissolved metals, or when mix ratio is too strong. When problems occur, use of water-resistant barrier creams may be a temporary control measure. Contact CIMCOOL<sup>®</sup> Technical Services at 1-513-458-8199 for specific recommendations.

<b>Carcinogen Listings</b>	NTP: No	IARC: No	OSHA: No
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**Signs and symptoms of exposure:** Eye injury may result from contact with concentrated product. Skin irritation can result from improper use and handling of concentrate or mix.

**Medical conditions generally aggravated by exposure:** May aggravate existing skin irritation where further defatting or skin penetration could occur.

#### 4. EMERGENCY AND FIRST AID PROCEDURES

**Eyes:** In case of eye contact with concentrated product or diluted mix, flush immediately with running water for 15 minutes, then promptly get medical attention to check for possible irritation.

**Skin contact:** In case of skin contact with product concentrate, wash with water as soon as possible.

Diluted product is not irritating to the skin when used as recommended and good personal hygiene is practiced. Remove severely contaminated clothing, including shoes. Launder before reuse. If irritation persists, get medical attention.

**Ingestion:** If concentrate or mix is swallowed, **do not induce vomiting.** Dilute by drinking water or milk. Immediately contact physician and obtain treatment. Swallowing small quantities of diluted product is not expected to cause injury or illness; but, as should be expected when drinking oily, soapy water, nausea, diarrhea or abdominal distress may be experienced.

**Inhalation:** Not expected to be a probable route of exposure to product concentrate. Inhalation of diluted mix can occur in applications where high mist levels are generated. OSHA has set a PEL of 15 mg/M<sup>3</sup> for any airborne particulate as a nuisance level of exposure. NIOSH has set a REL of 0.5 mg/M<sup>3</sup> for metalworking fluid mist.

#### 5. CONTROL MEASURES

**Respiratory Protection:** Product concentrate is not volatile. No misting would be expected when handling product concentrate.

In applications where time-weighted exposures are 0.5 to 5 mg/m<sup>3</sup>, mist reduction through improved ventilation, mist collection or process modification is recommended by NIOSH. Where this is not possible, NIOSH recommends the use of any air purifying, half-mask respirator including a disposable respirator equipped with any P<sub>1</sub> or P<sub>2</sub> series particulate filter. If the average exposure will

exceed 5 mg/m<sup>3</sup>, NIOSH recommends use of a powered, air-purifying respirator equipped with a hood or helmet and a HEPA filter. If respiratory problems are present when mist levels are < 0.5 mg/m<sup>3</sup>, respiratory protection should be based on the individual recommendation of a qualified health care provider.

**Caution:** The appropriate use and type of respirator is dependent upon use of the product and local operating conditions.

**Ventilation:** For most applications, normal shop ventilation is adequate. However, when high mist levels are generated or where machines are close together or ventilation is inadequate, operators may experience respiratory irritation. For such applications, use of splash guards or mist collectors is recommended.

**Eye Protection:** Safety shield or goggles required when handling concentrated product.

**Other protective clothing or equipment:** Effective metalworking plant protective clothing as appropriate.

**Work/Hygiene Practices:** Good personal hygiene should always be followed.

**Protective Gloves:** Impervious gloves, such as nitrile gloves, are recommended when handling product concentrate.

#### 6. HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

These ingredients may contribute to the acute product hazards listed under the Potential Health Effects section. Other substances, not Hazardous under the OSHA Hazard Communication Standard may be present. Further composition information may be available to health professionals as provided in the Standard.

HAZARDOUS COMPONENTS	CAS #	RANGE %
Mineral oil (solvent refined)	64741-96-4	40-70
Ethanolamine	141-43-5	5-10
Polyethoxylated propoxylated alcohol	69227-21-0	1-5

#### 7. FIRE AND EXPLOSION HAZARD DATA

**Flash Point (COC):** 385°F

**Flammable Limits:**

Upper Explosive Limit: NA

Lower Explosive Limit: NA

<b>Extinguishing Media:</b> Chemical foam, carbon dioxide, water fog, dry chemical				
<b>Special Firefighting Procedure:</b> None				
<b>Unusual Fire and Explosion Hazards:</b> None				
<b>Hazardous Combustion Products:</b> Smoke, fumes, HCl, oxides of carbon				
<b>NFPA/HMIS Codes:</b>	Health 1	Flammability 1	Reactivity 0	Other -
<b>8. ACCIDENTAL RELEASE MEASURES</b>				
Contain the spill, collect on absorbent material and discard as dictated by Federal, state and local regulations that may apply. Flush area thoroughly with water.				
<b>Reportable Quantity:</b> None				
<b>9. WASTE DISPOSAL</b>				
<b>For Used Mix:</b> Disposal procedures must comply with local, county, state and Federal regulations. If pre-treatment is needed, ultrafiltration or emulsion breaking may be used. Contact CIMCOOL Technical Services at 1-513-458-8199 for assistance.				
<b>For Unused Concentrate:</b> Concentrate is not a hazardous waste, as defined under 40 <b>CFR</b> 261. CIMCOOL Technical Services at 1-513-458-8199 can provide a list of waste haulers for your area.				
<b>"Empty" Containers</b> will contain a residue which is not considered a hazardous waste under RCRA regulations. Drums can be drained to a "drip dry" condition by inversion and can be offered for recycling or scrap.  <b>CAUTION:</b> Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE THIS CONTAINER TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION: IT MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to clean drums since residue is difficult to remove. Empty drums should be completely drained, promptly bunged, and promptly returned to a drum reconditioner. Empty disposable bulk containers should be drained, sealed, and properly discarded. Empty recyclable bulk containers should be drained, sealed, and recycled. Empty pails and jugs should be drained and properly discarded.				
<b>10. HANDLING AND STORAGE</b>				
Use only as recommended by Milacron Marketing Company. Avoid all contact of concentrate with eyes or skin. Do not swallow. If frozen, thaw completely at room temperature prior to use.				
<b>Other Precautions</b> - Product is combustible. Avoid open flames, sparks, and temperatures of 385°F or greater. Contains amines. Do not add sodium nitrite or other nitrosating agents to this product. Suspected cancer-causing nitrosamines could be formed.				
<b>11. PHYSICAL/CHEMICAL CHARACTERISTICS</b>				
<b>Boiling Point</b>	NA	<b>Evaporation Rate</b>	Like water when	

			diluted
<b>Specific Gravity</b>	1.024	<b>Solubility in Water</b>	100% Miscible
<b>Vapor Pressure (mm Hg)</b>	ND	<b>Appearance/Odor</b>	Clear, dark amber/chemical
<b>Melting Point</b>	ND	<b>pH (concentrate)</b>	NA
<b>Vapor Density</b>	ND	<b>pH (5.0% mix)</b>	8.9

**Volatile Organic Content (concentrate - by ASTM Method 2369 (Standard Test Method for Volatile Content of Coatings)):** 10.24%

## 12. REACTIVITY

**Stability:** Stable

**Conditions to Avoid:** NA

**Materials to Avoid:** Avoid contact with strong acids or oxidizers to product concentrate.

**Hazardous Polymerization:** Will not occur.

**Combustion Products:** Smoke, fumes, HCl, and oxides of carbon

## 13. TRANSPORT INFORMATION

	<b>Hazardous Materials Description and Proper Shipping Name (49 CFR 172.101):</b>	<b>Hazard Class (49 CFR 172.101):</b>
<b>BY LAND</b>	Not a hazardous material.	NA
<b>BY AIR OR VESSEL (49 CFR 175-176)</b>	NA	NA

U.S. Harmonized Tariff Code: 3403.19.0000

## 14. REGULATORY INFORMATION

### EXPOSURE GUIDELINES

<b>REGULATED MATERIAL</b>	<b>NIOSH REL</b>	<b>OSHA PEL</b>	<b>OSHA STEL</b>	<b>ACGIH TLV</b>	<b>ACGIH STEL</b>
<b>Metalworking Fluid Mist</b>	0.5 mg/M <sup>3</sup>				

<b>Mineral oil (mist)</b>		5 mg/M3		5 mg/M3	
<b>Ethanolamine</b>		3 ppm		3 ppm	6 ppm

**CERCLA:** Components present in this product at a level which could require reporting under 40 CFR 302.4: None

**EPCRA (SARA) TITLE III Extremely Hazardous Substances (302):** NA

**Hazardous Substances (311, 312):** Product concentrate is a hazardous substance as defined under the OSHA Hazard Communication Standard and may be reportable under the provisions of SARA Sections 311 and 312.

**HAZARD CATEGORIES:**

**Acute Health:** Yes

**Chronic Health:** No

**Fire:** Yes

**Sudden Release of Pressure:** No

**Reactive:** No

**RCRA:** Product concentrate does not meet the definition of a hazardous waste as defined under 40 CFR 261. It is possible that in use, the mix may be contaminated by metals or by chlorinated solvents and the final waste may meet the TCLP definition. Each facility should assess each waste stream to determine if the used fluid should be treated as a hazardous waste.

**TSCA:** The ingredients of this product are on the TSCA inventory.

**State Right-to-Know:** Many states have enacted Community Right-To-Know laws which require information beyond that mandated by federal laws. Since some of these laws are inconsistent with the federal laws, the information in this sheet may not fully meet the requirements of every state.

**Toxic Substances (313):** Components present in the product at levels which could require reporting under the statute:

<b>CHEMICAL NAME</b>	<b>CAS #</b>	<b>MAX. %</b>	<b>COMMENTS</b>
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Polychlorinated alkanes	none assigned	15	(NOTE: 10,000 lbs alkanes = 142 drums concentrate)

### GLOSSARY OF ABBREVIATIONS

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstracts Service
<b>CERCLA</b>	Comprehensive Environmental Response Compensation and Liability Act
<b>CFR</b>	Code of Federal Regulations
<b>COC</b>	Cleveland Open Cup
<b>DOT</b>	Department of Transportation
<b>EPCRA</b>	Emergency Planning and Community Right-to Know Act (aka SARA)
<b>IARC</b>	International Agency for Research on Cancer
<b>NA</b>	Not Applicable
<b>ND</b>	Not Determined
<b>NIOSH</b>	National Institute of Occupational Health and Safety
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>REL</b>	Recommended Exposure Limit
<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>STEL</b>	Short-Term Exposure Limit
<b>TCLP</b>	Toxicity Characteristics Leaching Procedure
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Chemicals Control Act

**VOC**

## Volatile Organic Compounds

NOTE: The opinions expressed herein are those of qualified experts within Milacron Marketing Company and of their suppliers. We believe that the information contained herein is current as of the date of this Material Data Sheet. Since the use of this information and of these opinions and the condition and use of the product are not within the control of Milacron Marketing Company, it is the user's obligation to determine the conditions of safe use of the product.