

SAFETY DATA SHEET

1. Identification

Product identifier CIMPULSE™ 49MP
METALWORKING FLUID

Other means of identification
SDS number Not applicable
Product code B01907

Recommended use METALWORKING FLUID

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

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 Not available.

2. Hazard identification

Physical hazards Not classified.

Health hazards Skin irritation Category 2
Serious eye irritation Category 2

Environmental hazards Not classified.

Label elements



Signal word Warning
Hazard statement Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.

Response IF ON SKIN: Wash with plenty of water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

| | |
|---------------------------------|---|
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Other hazards | None known. |
| Supplemental information | 1.12% of the mixture consists of component(s) of unknown acute oral toxicity. 1.12% of the mixture consists of component(s) of unknown acute dermal toxicity. |
| | Use in manufacturing processes only. |
| | 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 DISTILLATES | | 64742-52-5 | 10 - 30 |
| AMINOMETHYLPROPANOL | | 124-68-5 | 1 - 5 |
| ARYL, ALKYL DERIVS., SULFONATED SODIUM SALTS | | 148520-82-5 | 1 - 5 |
| MONOETHANOLAMINE | | 141-43-5 | 1 - 5 |
| TRIAZINETRIETHANOL | | 4719-04-4 | 1 - 5 |
| TRIETHANOLAMINE | | 102-71-6 | 1 - 5 |
| Other components below reportable levels | | | 60 - 80 |

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 physician if symptoms develop or persist. Under normal conditions of intended use, this material is not expected to be an inhalation hazard. |
| Skin contact | Rinse skin with water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated 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. |
| Ingestion | Rinse mouth thoroughly. Do not give liquids. 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. Skin irritation. |
| 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 ₂). 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 | 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. |
| 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 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. 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

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. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed container. If frozen, product may separate. Thaw completely at room temperature and stir thoroughly prior to use. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

ACGIH

Components

Type

Value

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

TWA

5 mg/m³

US. ACGIH Threshold Limit Values

Components

Type

Value

MONOETHANOLAMINE (CAS 141-43-5)

STEL

6 ppm

TWA

3 ppm

TRIETHANOLAMINE (CAS 102-71-6)

TWA

5 mg/m³

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

Components

Type

Value

MONOETHANOLAMINE (CAS 141-43-5)

STEL

15 mg/m³

6 ppm

TWA

7.5 mg/m³

3 ppm

TRIETHANOLAMINE (CAS 102-71-6)

TWA

5 mg/m³

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

Components

Type

Value

MONOETHANOLAMINE (CAS 141-43-5)

STEL

6 ppm

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

| Components | Type | Value |
|--------------------------------|------|---------|
| | TWA | 3 ppm |
| TRIETHANOLAMINE (CAS 102-71-6) | TWA | 5 mg/m3 |

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

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

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

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

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

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

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

| Components | Type | Value |
|---------------------------------|-----------|----------|
| MONOETHANOLAMINE (CAS 141-43-5) | 15 minute | 6 ppm |
| | 8 hour | 3 ppm |
| TRIETHANOLAMINE (CAS 102-71-6) | 15 minute | 10 mg/m3 |
| | 8 hour | 5 mg/m3 |

Biological limit values

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

Appropriate engineering controls

Good general ventilation 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 and safety shower.

Individual protection measures, such as personal protective equipment

Eye/face protection

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

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Nitrile gloves are recommended.

Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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 | 9.8 |
| Melting point/freezing point | < 32 °F (< 0 °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. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |
| Other information | |
| Explosive properties | Not explosive. |
| Oxidizing properties | Not oxidizing. |
| pH in aqueous solution | 8.5 @ 5% |
| Specific gravity | 1.017 |
| VOC ASTM D2369 | 9 % |

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 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. |
| Incompatible materials | Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines. Acids. Oxidizing agents. |
| Hazardous decomposition products | Smoke, fumes, oxides of nitrogen, and oxides of carbon |

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|-------------------------|
| Inhalation | Not classified. |
| Skin contact | Causes skin irritation. |
| Eye 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. Skin irritation.

Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|--|---------|-------------------------|
| AMINOMETHYLPROPANOL (CAS 124-68-5) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 2000 mg/kg |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 2900 mg/kg |
| ARYL, ALKYL DERIVS., SULFONATED SODIUM SALTS (CAS 148520-82-5) | | |
| Acute | | |
| Oral | | |
| <i>Solid</i> | | |
| LD50 | Rat | 404 mg/kg |
| SEVERELY-HYDROTREATED NAPHTHENIC DISTILLATES (CAS 64742-52-5) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 5000 mg/kg |
| Inhalation | | |
| <i>Mist</i> | | |
| LC50 | Rat | > 5.1 mg/l, 4 hours ATE |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | > 5000 mg/kg |
| TRIAZINETRIETHANOL (CAS 4719-04-4) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 4000 mg/kg |
| Oral | | |
| <i>Liquid</i> | | |
| LD50 | Rat | 1000 mg/kg |
| TRIETHANOLAMINE (CAS 102-71-6) | | |
| Acute | | |
| Dermal | | |
| <i>Liquid</i> | | |
| LD50 | Rabbit | > 2000 mg/kg |

| Components | Species | Test Results |
|---|---|---|
| Oral <i>Liquid</i> LD50 | Rat | 4190 mg/kg |
| Skin corrosion/irritation | Causes skin irritation. | |
| Serious eye damage/eye irritation | Causes eye 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. |
| Respiratory sensitization | Not a respiratory sensitizer. | |
| Skin sensitization | This product is not expected to cause skin sensitization. | |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. | |
| 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. |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. | |
| Specific target organ toxicity - single exposure | Not classified. | |
| Specific target organ toxicity - repeated exposure | Not classified. | |
| Aspiration hazard | Not an aspiration hazard. | |
| Chronic effects | Not classified. | |
| 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

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

| Components | Species | Test Results | |
|--|---------|---|--------------------------|
| AMINOMETHYLPROPANOL (CAS 124-68-5) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Crustacea | EC50 | Daphnia | 193 mg/l, 48 hours |
| Fish | LC50 | Bluegill (<i>Lepomis macrochirus</i>) | 190 mg/l, 96 hours |
| ARYL, ALKYL DERIVS., SULFONATED SODIUM SALTS (CAS 148520-82-5) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Crustacea | EC50 | Daphnia | 1.62 mg/l, 48 hours OECD |
| Fish | LC50 | Fish | 1.67 mg/l, 96 hours OECD |
| MONOETHANOLAMINE (CAS 141-43-5) | | | |
| Aquatic | | | |
| Fish | LC50 | Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) | 114 - 196 mg/l, 96 hours |
| <i>Acute</i> | | | |
| Crustacea | EC50 | Daphnia | 65 mg/l, 48 hours ECHA |
| TRIAZINETRIETHANOL (CAS 4719-04-4) | | | |
| Aquatic | | | |
| <i>Acute</i> | | | |
| Crustacea | EC50 | Daphnia | 11.9 mg/l, 48 hours ECHA |

| Components | | Species | Test Results |
|--------------------------------|------|---------------------------------|------------------------------|
| Fish | LC50 | Fish | 16 - 240 mg/l, 96 hours ECHA |
| TRIETHANOLAMINE (CAS 102-71-6) | | | |
| Aquatic | | | |
| Crustacea | EC50 | Water flea (Ceriodaphnia dubia) | 565.2 - 658.3 mg/l, 48 hours |
| <i>Acute</i> | | | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 450 - 1000 mg/l, 96 hours |

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

| | |
|--|--------------------------|
| ARYL, ALKYL DERIVS., SULFONATED SODIUM SALTS | 3.32, OECD SIDS - CALC'D |
| MONOETHANOLAMINE | -1.31 |
| TRIAZINETRIETHANOL | -2 |
| TRIETHANOLAMINE | -2.3 |

Bioconcentration factor (BCF)

| | |
|------------------|------------------|
| MONOETHANOLAMINE | < 3.2, ESTIMATED |
|------------------|------------------|

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).

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 This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

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) | Yes |
| Canada | Domestic Substances List (DSL) | No |
| Canada | Non-Domestic Substances List (NDSL) | Yes |
| China | Inventory of Existing Chemical Substances in China (IECSC) | No |
| 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 09-08-2016

Revision date 10-21-2019

Version # 04

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. The information in the sheet was written based on the best knowledge and experience currently available.

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