



SAFETY DATA SHEET

SECTION 1: Identification

Product identifier: Tri-Cool MD-7
Other Means of identification: MD-7
Recommended use: Metalworking fluid
Recommended restrictions: None known
Manufacturer/Importer/Supplier/Distributor information
Company name: Trico Corporation
Company Address: 1235 Hickory Street
Pewaukee, WI 53072
Company Telephone: Office hours (Mon-Fri)
7:30am – 4:00 pm (CST)
(262) 691-9336
Emergency phone number: USA & Canada Chemtrec - 800-424-9300
International Chemtrec - 703-527-3887

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of 1910.1200: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture: SKIN CORROSION / IRRITATION – Category 2
SKIN SENSITIZATION – Category 1
ASPIRATION HAZARD—Category 1

GHS Hazard pictogram(s):



GHS Signal word: DANGER
GHS Hazard statements: Causes skin irritation
May cause an allergic skin reaction.
May be fatal if swallowed and enters airways.

GHS Precautionary statement(s):

Prevention: Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace.

Response: IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Wash contaminated clothing before reuse.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise Classified (HNOC): Container vapor space may contain hydrogen sulfide which may cause respiratory irritation.

SECTION 3: Composition / information on ingredients

Ingredient name	%	CAS #
Distillates (petroleum), hydrotreated heavy paraffinic	>90%	64742-54-7
Synthetic Base Stock	<10%	Proprietary
Additive	<1%	Proprietary

SECTION 4: First aid measures

Description of necessary first aid measures

Eye contact: If irritation or redness develops from exposure, immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, seek medical attention.

Inhalation: If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If breathing stops, provide artificial respiration. Seek immediate medical attention.

Skin contact: Take off contaminated clothing and wash before re-use. Wash skin thoroughly with soap and water. If skin irritation or rash occurs: Get medical attention. Launder contaminated clothing before reuse.

Ingestion: Do NOT induce vomiting. Aspiration of material due to vomiting can cause chemical pneumonitis which can be fatal. If vomiting occurs naturally, the casualty should lean forward to reduce the risk of aspiration. Rinse mouth. Immediately call a POISON CENTER/doctor.

Most important symptoms/effects, acute and delayed

Potential acute health effects: Inhalation of oil mists or vapors generated at elevated temperatures may cause respiratory irritation. Accidental ingestion can result in minor irritation of the digestive tract, nausea and diarrhea. Dry skin and possible irritation with repeated or prolonged exposure.

Notes to physician: Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation exposure to oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities. Hydrosulfide anion is strongly bound to hemoglobin in a manner similar to cyanide. A dose of sodium nitrite would produce methemoglobin in the blood which would then partially inactivate this poison.

SECTION 5: Fire-fighting measures

Suitable extinguishing media: Dry chemical, carbon dioxide, foam or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F / 100°C. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Material may contain hydrogen sulfide. Hydrogen sulfide is a toxic and flammable gas. A solid stream of water will spread the burning material. Material creates a special hazard because it floats on water.

Hazardous Combustion Products: Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulfur may also be formed.

Special protective equipment for firefighters: For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self-contained breathing apparatus should be worn. Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged

containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely. Avoid spreading burning liquid with water used for cooling purposes.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep all sources of ignition away from spill/release. The use of explosion-proof electrical equipment is recommended. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8).

Environmental precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements. Spills into or upon navigable waters, the contiguous zone, or adjoining shorelines that cause a sheen or discoloration on the surface of the water, may require notification of the National Response Center.

Methods and material for containment and cleaning up: Notify relevant authorities in accordance with all applicable regulations. Immediate cleanup of any spill is recommended. Dike far ahead of spill for later recovery or disposal. Absorb spill with inert material such as sand or vermiculite, and place in suitable container for disposal. If spilled on water remove with appropriate methods (e.g. skimming, booms or absorbents). In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.

SECTION 7: Handling and storage

Precautions for safe handling: Keep away from flames and hot surfaces. Liberated hydrogen sulfide gas. Open container carefully and only in adequately ventilated areas or use appropriate respiratory protection. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Avoid contact with skin. Observe good industrial hygiene practices. Use personal protective equipment as required. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Avoid environmental contamination.

Conditions for safe storage: Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated area away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material. Protect container(s) against physical damage.

“Empty” containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. “Empty” drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

SECTION 8: Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	CAS#	ACGIH	OSHA	Other
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	TWA: 5 mg/m ³ STEL: 10 mg/m ³ As Oil Mist, if generated	TWA: 5 mg/m ³ (as Oil Mist, if generated)	None

Engineering controls: Maintain air concentrations below occupational exposure standards using engineering controls if necessary. Local exhaust ventilation is recommended. Eye wash station and showers for emergency use.

Respiratory Protection: Where there is potential for airborne exposure above the exposure limit a NIOSH certified air purifying respirator equipped with R or P95 filters may be used.

Skin/Hand Protection: Use nitrile or neoprene gloves. Use good industrial hygiene practices. In case of skin contact, wash hands and arms with soap and water.

Eye/Face Protection: The use of eye/face protection is not normally required; however, good industrial hygiene practice suggests the use of eye protection that meets or exceeds ANSI Z.87.1 whenever working with chemicals.

Hygiene Measures: Observe good industrial hygiene practices. Avoid contact with skin. Wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace.

SECTION 9: Physical and chemical properties

Appearance

Physical state:	Liquid
Color:	Straw
Odor:	Mild
Odor threshold:	Not available
pH:	Not available
Melting point:	Not available
Boiling point:	Not available
Flash point:	>185°C / 365°F (ASTM-D92)]
Burning time:	Not applicable
Burning rate:	Not applicable
Evaporation rate:	Not available
Flammability (solid,gas):	Not available
Lower and upper explosive (flammable limits):	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Specific Gravity:	0.83
Solubility:	Not available
Solubility in water:	Insoluble
Partition coefficient: (n-octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Elemental Phosphorus:	Not available
VOC content:	Not available

SECTION 10: Stability and reactivity

Reactivity: None known

Chemical stability: The product is stable under normal conditions.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Do not expose to excessive heat, ignition sources, or oxidizing materials.

Incompatible materials: Avoid contact with strong oxidizing agents and strong reducing agents.

Hazardous decomposition products: Diphenylamine and alkenes may also be released. Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, sulfur oxides, mercaptans, sulfides, including hydrogen sulfide and other products of incomplete combustion. Thermal decomposition may generate phosphorus oxides and other phosphorus containing compounds.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation: Exposure to hydrogen sulfide can cause temporary loss of the sense of smell and irritation of the eyes, nose or throat.

Ingestion: No data available.

Skin Contact: Causes skin irritation

Eye Contact: No data available.

Information on toxicological effects

Acute toxicity

Oral: Swallowing material may cause irritation of the gastrointestinal lining, nausea, vomiting, diarrhea, and abdominal pain.

Dermal: Not classified for acute toxicity based on available data.

Inhalation: Not classified for acute toxicity based on available data.

Skin Corrosion/Irritation: Causes skin irritation. Remarks: Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin. Prolonged or repeated contact may cause irritation.

Serious Eye Damage/Eye Irritation: Not classified as a primary eye irritant.

Respiratory sensitization: No data available.

Skin sensitization: Hydroxyalkyl Carboxylic Acid classified as a skin sensitizer, Category 1B.

Specific Target Organ Toxicity-Single Exposure: If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract.

Specific Target Organ Toxicity-Repeated Exposure: No data available.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Chronic Effects

Carcinogenicity: This product contains mineral oils which are severely refined and not considered carcinogenic. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test. Not considered a carcinogen by the International Agency for Research on Cancer.

Germ Cell Mutagenicity: Not expected to cause heritable genetic effects.

Reproductive Toxicity: Not expected to cause reproductive toxicity.

SECTION 12: Ecological information

Toxicity: All acute aquatic toxicity studies on samples of lubricant base oils show acute toxicity values greater than 100 mg/L for invertebrates, algae and fish. These tests were carried out on water accommodated fractions and the results are consistent with the predicted aquatic toxicity of these substances based on their hydrocarbon compositions.

Persistence and Degradability: The hydrocarbons in this material are not readily biodegradable, but since they can be degraded by microorganisms, they are regarded as inherently biodegradable.

Persistence per IOPC Fund definition: Persistent

Bioaccumulative Potential: Log Kow values measured for the hydrocarbon components of this material are greater than 5.3, and therefore regarded as having the potential to bioaccumulate. In practice, metabolic processes may reduce bioconcentration.

Mobility in Soil: Volatilization to air is not expected to be a significant fate process due to the low vapor pressure of this material. In water, base oils will float and spread over the surface at a rate dependent upon viscosity. There will be significant removal of hydrocarbons from the water by sediment adsorption. In soil and sediment, hydrocarbon components will show low mobility with adsorption to sediments being the predominant physical process. The main fate process is expected to be slow biodegradation of the hydrocarbon constituents in soil and sediment.

Other adverse effects: None anticipated.

SECTION 13: Disposal considerations

Waste Disposal: The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Land Transport DOT: Not regulated

Air Transport IATA: Not regulated

Sea Transport IMDG: Not regulated

SECTION 15: Regulatory information

U.S. Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	CAS number	Reportable Quantity	Calculated ¹
Isobutyl alcohol	78-83-1	5000 lbs	>50000 lbs
Methanol	67-56-1	5000 lbs	>50000 lbs
1-Octene	111-66-0	100 lbs	>50000 lbs
Phenol	108-95-2	1000 lbs	>50000 lbs

¹This is the amount product/material required to be released before CERCLA reporting is required.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 311 Classifications

Skin Corrosion or Irritation

Respiratory or Skin Sensitization

Aspiration Hazard

SARA 302 Extremely Hazardous Substance: None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	CAS number	Percent by Weight	Reportable Quantity
Isobutyl alcohol	78-83-1	0.3%	5000 lbs

Methanol	67-56-1	0.3%	5000 lbs
1-Octene	111-66-0	40.0 PPM	100 lbs
Phenol	108-95-2	27.0 PPM	1000 lbs

SARA 313 (TRI Reporting): None present or none present in regulated quantities.

US State Regulations

California Proposition 65: This product can expose you to chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm: Methanol, Propylene oxide, Ethylene oxide, 1,4 Dioxane, Naphthalene (91-20-3).



WARNING: Cancer - www.P65Warnings.ca.gov.

This warning is given to comply with California Health and Safety Code 25249.6 and does not constitute an admission or a waiver of rights.

Inventory Status

Australia (AICS): All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDL): All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

China (IECSC): All components of this product are listed on the Inventory of Existing Chemical Substances in China.

Japan (ENCS): This product contains a substance or polymer that has been notified and is restricted to import by specific legal entities.

Korea (ECL): All components are in compliance in Korea.

New Zealand (NZIoC): All components are in compliance with chemical notification requirements in New Zealand.

Philippines (PICCS): All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

Switzerland (SWISS): All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Taiwan (TCSCA): All components of this product are listed on the Taiwan inventory.

United States (TSCA): All substances contained in this product are listed on the TSCA inventory or are exempt.

SECTION 16: Other information

Revision Date: June 26, 2018

Previous Revision Date: February 28, 2014

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