

SAFETY DATA SHEET

Section 1 - Identification

Product Name: TWIN-KUT 11 Product Code: TWIN-S01

Company Information:

Twin Specialties Corp.
15 East Ridge Pike
Conshohocken, PA 19428

Phone: 610-834-7900
Fax: 610-834-7903
Emergency: 800-424-9300

Product Use: Metalworking fluid

Not recommended for: No restrictions known

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Section 2 - Hazard(s) Identification

This Safety Data Sheet conforms with the OSHA Hazard Communication Standard (29 CFR 1910.1200) as revised in 2012.

This product is NOT classified as hazardous according to current OSHA standards.

There are no signal words, hazard symbols, hazard or precautionary statements required.

Hazards Not Otherwise Classified: None known

Section 3 - Composition / Information on Ingredients

| Chemical Name | CAS Number | Percent |
|---|------------|---------------|
| Distillates (petroleum), hydrotreated heavy naphthenic(1) | 64742-52-5 | 90.0 - 100.0% |
| Lard oil | 8016-28-2 | 1.0 - 5.0% |

(1) Composition comment: IP346 DMSO extract for base oil substances is < 3.0%

Section 4 - First Aid Measures

Inhalation: Overexposure by inhalation is unlikely, but should it occur, immediately remove from exposure and seek medical attention. If breathing is irregular or has stopped, start resuscitation; administer oxygen, if available. If overexposed to mist, remove from further exposure until excessive mist condition subsides. If respiratory discomfort persists, seek medical attention.

Eye Contact: Remove contact lenses if present. Immediately flush eyes with water for at least 15 minutes. If irritation occurs, obtain medical assistance.

Skin Contact: Remove any contaminated clothing and thoroughly wash contact areas with soap and water. Launder clothing before reuse. If irritation develops, obtain medical assistance.

Ingestion: Do not induce vomiting. If vomiting occurs, have victim lean forward to reduce risk of aspiration. Obtain emergency medical attention.

Most important symptoms/effects, acute and delayed: Prolonged or repeated skin contact may cause drying, cracking, or irritation.

Notes to Physician: Provide general supportive measures and treat symptomatically. Symptoms may be delayed.

Section 5 - Fire Fighting Measures

Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide to extinguish flames. Do not use straight streams of water.

Specific Hazards Arising from the Chemical: This product is not flammable. It will burn if involved in a fire.

Hazardous Combustion Products: Smoke, fumes, carbon monoxide, carbon dioxide, sulfur oxides, and hydrocarbons.

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard equipment and in enclosed spaces, self-contained breathing apparatus. Use water spray to cool fire-exposed surfaces and to protect personnel.

Fire-Fighting Equipment: Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, and face mask.

Section 6 - Accidental Release Measures

Personal Precautions: Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing/equipment (Section 8). In case of spill, beware of slippery floors and surfaces.

Environmental Precautions: Contain spills with sand, earth, or any suitable adsorbent material. Prevent spillage from entering soil, waterways, drains and sewers. Notify relevant authorities in accordance with all applicable regulations.

Small Spill: Eliminate all ignition sources. Stop leak if you can do so without risk. Absorb with earth, sand, or other non-combustible material and transfer to containers for later disposal.

Large Spills: Eliminate all ignition sources. Stop leak if you can do so without risk. Dike the spilled material where possible. Remove with vacuum trucks or by pumping into containers. Absorb with inert materials such as dry clay, sand, or diatomaceous earth. Dispose of waste in accordance with all applicable laws.

Section 7 - Handling and Storage

Precautions for Safe Handling: Keep away from heat, sparks, open flame, and other sources of ignition. Avoid prolonged or repeated contact with skin. Prevent small spills and leakage to avoid slip hazard.

Conditions for Safe Storage: Store in a dry place. Keep away from incompatible materials, open flames, and high temperatures. Do not store in open or unlabelled containers.

Section 8 - Exposure Control / Personal Protection

| Chemical Name / CAS No. | OSHA Exposure Limits | ACGIH Exposure Limits | Other Exposure Limits |
|--|----------------------------------|--|-----------------------|
| Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5 | PEL = 5 mg/m ³ (mist) | TWA = 5 mg/m ³ (mist) STEL = 10 mg/m ³ (mist) | |
| Lard oil 8016-28-2 | None established | None established | |

Engineering Controls: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal Protective Equipment

Eye/Face Protection: Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.

Skin Protection: Chemical/oil resistant gloves are recommended. Neoprene, nitrile, polyvinyl alcohol(PVA), and Viton are recommended. Normal work clothing (long sleeved shirts and long pants) is recommended. Use a chemical-resistant apron to avoid contaminating regular clothing.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate.

General Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

Section 9 - Physical and Chemical Properties

| | |
|---|--|
| Appearance: Clear yellow liquid | Odor: Mild |
| Vapor Pressure: <.1 mm Hg (20 C) | Odor threshold: Not available |
| Vapor Density: >2 | pH (5% in water): Not applicable |
| Density (lb/gal): 7.56 | Specific Gravity (@60 F): 0.907 |
| Melting point: Not applicable | Freezing point: Not applicable |
| Solubility in water: Insoluble | Boiling point (initial): 340°C |
| Flash point (minimum): 334 F,168 C | Evaporation rate: Not available |
| Flammability: Not applicable | Explosive Limits: 1% - 7% |
| Partition coefficient: No data available | Autoignition temperature: Not available |
| Decomposition temperature: Not available | Viscosity @ 40C: >20 cst |
| Grams VOC less water: 0 | Pour Point: <20 F |

Section 10 - Stability and Reactivity

Reactivity: Non-reactive under normal conditions.

Chemical Stability: Stable under normal temperature conditions.

Conditions to Avoid: Excessive heat and ignition sources.

Incompatible Materials: Strong oxidizing agents.

Possibility of Hazardous Reactions: Will not occur under normal conditions of use.

Hazardous Decomposition Products: Combustion will produce fumes, smoke, carbon monoxide, and other asphyxiants.

Section 11 - Toxicological Information

Routes / Signs / Symptoms of Exposure:

Ingestion: Not likely to occur. No harmful effects expected in amounts likely to be ingested by accident. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

Inhalation: Inhalation of oil mist or vapors formed during heating may irritate the respiratory system and provoke coughing. A sore throat may result.

Skin Contact: Prolonged or repeated contact may defat and dry the skin, leading to irritation and dermatitis. Symptoms may include redness, drying and cracking of the skin. Permanent damage is unlikely.

Eye Contact: Direct contact with the eyes may cause temporary irritation. Permanent damage is unlikely.

Information on Toxicological Effects:

All information below is based on component data. This product has not been tested as a whole.

Acute toxicity: Based on available data, this product is judged to have a low level of acute toxicity by oral, dermal or inhalation routes of exposure.

Chronic Toxicity: Prolonged or repeated skin and eye contact may produce irritation. Symptoms may include redness, drying, and cracking of the skin. However, based on available data, this product is judged to be neither a "corrosive", an "irritant", or a "sensitizer" by OSHA criteria.

Skin corrosion/irritation: Not classified. Prolonged contact may cause temporary irritation.

Serious eye damage/irritation: Not classified. Direct contact may cause minor irritation.

Respiratory sensitization: Not classified

Skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity - single exposure: Not classified

- **repeated exposure:** Not classified

Aspiration hazard: Not classified

Carcinogenicity: The components of this product are not classified as a human carcinogen according to ACGIH, IARC, NTP, and OSHA.

Section 12 - Ecological Information

Ecotoxicity: This product is not expected to be harmful to aquatic organisms.

Persistence/Degradability: This product is expected to be inherently biodegradable.

Bioaccumulation: No data available.

Soil Mobility: No data available.

Section 13 - Disposal Considerations

Waste Disposal: Reclaim material if possible. Waste must be handled in accordance with all federal, state and local regulations. This product is not a RCRA hazardous waste if uncontaminated. If "used", RCRA criteria (ignitability, reactivity, corrosivity, toxicity characteristics) must be determined. Do not flush product to a drain and/or a storm sewer. Contract to an authorized disposal service.

Contaminated Packaging: Empty containers may contain residue and can be dangerous. Empty containers should be completely drained and safely stored until appropriately reconditioned or disposed. They should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

Section 14 - Transport Information

This material is classified for transport as follows:

| <u>Agency</u> | <u>Proper Shipping Name</u> | <u>UN Number</u> | <u>Packing Group</u> | <u>Hazard Class</u> |
|---------------|---------------------------------------|------------------|----------------------|---------------------|
| DOT | Not regulated as a hazardous material | | | |
| IATA | Not regulated as a dangerous good | | | |
| IMDG | Not regulated as a dangerous good | | | |

Section 15 - Regulatory Information

All components of this product are listed in the TSCA inventory.

SARA 311/312 Hazard Categories:

Acute Health Hazard: No

Chronic Health Hazard: No

Fire Hazard: No

Sudden Release of Pressure Hazard: No

Reactive Hazard: No

U. S. Federal Regulations: This material contains the following chemicals that are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4):

- None

U. S. State Regulations: This material contains the following chemicals that are listed under various state Right to Know hazardous substance lists:

- None

Section 16 - Other Information

Hazardous Material Information System (HMIS)

| | |
|---------------------|---|
| HEALTH | 0 |
| FLAMMABILITY | 1 |
| PERSONAL PROTECTION | C |

HMIS & NFPA Hazard Rating

Legend

* = Chronic Health Hazard

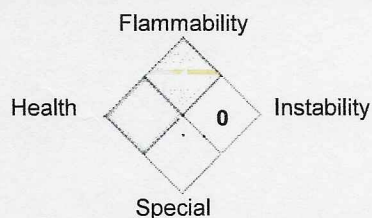
0 = INSIGNIFICANT

1 = SLIGHT

2 = MODERATE

3 = HIGH

National Fire Protection Association (NFPA)



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Reviewer Revision 1

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