



# SAFETY DATA SHEET (SDS)

## 1 - IDENTIFICATION

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### SAF-T-COOL 451

**Chemical family:** Emulsifiable Mineral Oil

**Recommended use:** Metalworking Machining Coolant.

#### Tower Metalworking Fluids

4300 South Tripp Ave.  
Chicago, IL 60632

**Information telephone #:** (773) 927-6161 (7:30 AM to 4 PM, CST, Monday to Friday)

**24 Hr. emergency telephone #:** CHEMTREC: (800) 424-9300

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## 2 - HAZARDS IDENTIFICATION

**OSHA/HCS Status:** This material is classified as non-hazardous under OSHA regulations (29 CFR 1910.1200) (Hazcom 2012)

**Classification of chemical/mixture:** Not Classified

**Signal word:** None required.

**Hazard Pictogram:** None required.

**Hazard statement:** None required.

**Precautionary statement:** None required.

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## 3 - COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical name	CAS #	Concentration
Ingredients classified as non-hazardous under OSHA regulations (29CFR 1900-1200) (Hazcom 2012)		

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## 4 - FIRST-AID MEASURES

Material Name: SAF-T-COOL 451  
Revision Date: December 12, 2017

**Description of first aid measures:**

Inhalation: If overcome by fumes from hot product, move to fresh air. Get medical attention, if needed.

Ingestion: If swallowed, get medical attention. Do not induce vomiting.

Skin: Wash with warm water and mild soap. Remove contaminated clothing and shoes.

Eye: Remove contact lenses if present and easy to do. Flush with water for 15 minutes or until irritation subsides.

**Symptoms and effects, both acute and delayed:**

Acute: Skin exposure may cause mild irritation. May cause transient eye irritation.

Chronic: Prolonged or repeated skin contact may tend to remove natural oils, resulting in the development of dermatitis.

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**5 - FIRE-FIGHTING MEASURES****Extinguishing media:**

Suitable: Non-flammable. If water is heated off, use water spray (fog) or foam, carbon dioxide, dry-chemical or universal type foam to extinguish flames.

Unsuitable: Do not use straight streams of water.

**Specific hazards and combustion products:** Products may include and are not limited to oxides of carbon, nitrogen when water content has evaporated and residue is exposed to combustion.

**Special protective equipment and precautions for fire-fighters:** This product is not expected to burn until all the water is boiled/evaporated, the remaining organics may be ignitable and should be treated as an oil fire. If near fire, cool exposed containers with cold water to prevent rupture. Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

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**6 - ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** All persons dealing with the spill should wear appropriate personal protective equipment. Keep others away from spill. Restrict access to area until the spill has been cleaned up.

**Methods and materials for containment and cleaning up:** Contain spill and transfer to suitable containers or soak up in absorbent medium. Avoid release into waterways. If spill enters sewer, notify proper authorities.

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**7 - HANDLING AND STORAGE**

**Precautions for safe handling:** Wear proper personal protective equipment. Avoid contact with skin, eyes and clothing; minimize breathing oil mists. Wash thoroughly after handling; launder or dry-clean soiled clothing before reuse.

**Conditions for safe storage:** Keep containers closed when not in use. Protect from freezing temperatures. Avoid heating above 120°F for prolonged periods of time. Do not store or handle near strong oxidants. Empty containers may retain product residue; all precautions apply to empty containers.

**Incompatible materials:** Strong oxidizing materials.

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**8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION**

**Exposure limits:** No exposure standards have been established for this material.

**Engineering controls:** None required under normal use conditions. Use proper ventilation to control airborne (mist) levels.

**Individual protection measures and personal protective equipment:** Splash goggles, face shield, chemical resistant gloves. Use chemical resistant apron if needed to avoid prolonged or repeated skin contact.

**TLV(for total product):** 5mg/m<sup>3</sup> as oil mist in air over an 8 hour daily exposure (ACGIH)

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## 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Amber liquid
<b>Odor:</b>	Bland
<b>Odor threshold:</b>	Data currently unavailable
<b>Product pH:</b>	9.0 – 9.5
<b>Freezing point:</b>	32°F
<b>Boiling point:</b>	212°F
<b>Flash point:</b>	None
<b>Evaporation rate:</b>	As water
<b>Flammability:</b>	Non-flammable
<b>Upper/lower flammability limits:</b>	Information not available.
<b>Vapor pressure:</b>	< 0.01 mm Hg @ 25°C
<b>Vapor density:</b>	>1 (Air = 1)
<b>Relative density:</b>	0.97 (Water = 1)
<b>Solubility:</b>	Emulsifies in water.
<b>Partition coefficient (n-octanol/water):</b>	Information not available.
<b>Auto-ignition temperature:</b>	Information not available.
<b>Decomposition temperature:</b>	Information not available.
<b>Viscosity:</b>	Information not available.

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## 10 - STABILITY AND REACTIVITY

**Chemical stability:** Stable under normal conditions.

**Possibility of hazardous reactions:** Hazardous polymerization does not occur.

**Conditions to avoid:** Strong oxidizing agents.

**Incompatible materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Material does not decompose at ambient temperatures. Decomposition products may include and are not limited to oxides of carbon, nitrogen when water content has evaporated and residue is exposed to combustion.

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## 11 - TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure:

Inhalation: No  
Ingestion: Yes  
Skin: Yes  
Eye: Yes

### Potential symptoms of exposure:

Inhalation: None expected from normal use.  
Ingestion: No information available.  
Skin: Minimally toxic under normal use. May be mildly irritating with prolonged and/or repeated skin contact.  
Eye: Direct contact with eyes may cause transient irritation. Injuries not expected under normal use.

**Toxicological data:** No data available.

**NTP, IARC or OSHA carcinogen:** None of the constituents of this product have been identified as possible or proven carcinogens by NTP, IARC, or OSHA.

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## 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** Data not available.

**Persistence and degradability:** Data not available.

**Bioaccumulative potential:** Data not available.

**Mobility in soil:** Data not available.

**Other adverse effects:** None known.

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### 13 - DISPOSAL CONSIDERATIONS

**Waste disposal method:** Dispose of in accordance with federal, state and local regulations.

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

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### 14 - TRANSPORT INFORMATION

**DOT Shipping:** Not regulated by the U.S. Department of Transportation as a hazardous material.

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### 15 - REGULATORY INFORMATION

**Sara III** (Superfund Amendment and Reauthorization Act of 1986) 40 CFR Part 372 and 40 CFR Part 355

Sections 302, 304 and 40 CFR Part 355 – Extremely Hazardous Substances:

Component	%	RQ (lbs.)	TPQ (lbs.)	CAS#
NONE	-	-	-	-

Sections 311, 312 and 40 CFR Part 355 – Hazard Categories:

<b>ACUTE (IMMEDIATE HEALTH HAZARD):</b>	NO	<b>FIRE HAZARD:</b>	YES
<b>CHRONIC (DELATED HEALTH HAZARD):</b>	NO	<b>REACTIVE HAZARD:</b>	NO
<b>SUDDEN PRESSURE RELEASE:</b>	NO		

Sections 313 and 40 CFR Part 372 – Toxic Chemicals:

Component	%	CAS#
NONE	-	-

**CERCLA** (Comprehensive Environmental Response, Compensation and Liability Act)

Section 102 and 40 CFR Part 302 – Hazardous Substances:

Component	%	RQ (lbs.)	CAS#
NONE	-	-	-

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### CLEAN WATER ACT

Under section 311 (b) (4) of this act, contamination of surface waters by petroleum products must be reported immediately to the National Response Center. SECTION 311 (b) (4) DOES APPLY TO SAF-T-COOL 461

**California Proposition 65:** None of the ingredients are listed.

**TSCA** (Toxic Substances Control Act): All components of this formula are listed in the TSCA inventory.

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### 16 - OTHER INFORMATION

**Preparation Date:** December 12, 2017

**Revision Date:** December 12, 2017

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*The information appearing in this document is based upon data obtained from raw material manufacturers and/or recognized technical sources. While this information is believed to be correct, TOWER METALWORKING FLUIDS makes no representations as to its accuracy or sufficiency, usage, or the hazards connected with the use of this material. Since this product may be applied under conditions unfamiliar to us or beyond our control, we claim no responsibility for the results of its use, and users are responsible for the verification of this information under their own operation conditions to determine whether the product is suitable for their particular purposes, and these users assume all risks of their use, handling, and disposal of the product. This information relates only to the product designated above and does not relate to its use in combination with any other material in any other process.*

