

**Section 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: Synthetic Cutting Fluid CF9930  
Part Number: CF9930 (all sizes)  
Relevant Use: Metalworking fluid - synthetic  
Manufacturer: Sturbridge Metallurgical Services Inc.  
City, State, Zip: Sturbridge MA 01566  
Phone Number: 508-347-5288  
Emergency Phone: CHEMTREC 1-800-424-9300 (USA)

**Section 2: Hazard(s) Identification**

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Hazardous classification of the substance or mixture:**

Not classified.

**Signal word:** No Signal word

**Hazard Statements:** No known significant effects or critical hazards.

**Precautionary Statements:**

Prevention: Not applicable  
Response: Not applicable  
Storage: Not applicable  
Disposal: Not applicable

**Hazards not otherwise classified:** Defatting to the skin

**Section 3: Composition/Information on Ingredients**

Corrosion inhibitors and additives in aqueous solution

Chemical Name	CAS No.	% Concentration
Triethanolamine	102-71-6	≥10-<25
Borates, tetra, sodium salts-anhydrous	1330-43-4	≥1-<3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

**Occupational exposure limits, if available, are listed in Section 8.**

**Section 4: First-Aid Measures**

**First-aid measures general:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

**First-aid measures after eye contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

**First-aid measures after skin contact:** Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

**First-aid measures after inhalation:** If inhaled, remove to fresh air. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Get medical

attention if symptoms occur.

**First-aid measures after ingestion:** Do not induce vomiting unless directed to do so by medical personnel. Wash out mouth with water if person is conscious. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to Physician:** In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treatment should in general be symptomatic and directed to relieving any effects.

Specific treatments: No specific treatment

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**Section 5: Fire-Fighting Measures**

**Suitable extinguishing media:** In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

**Unsuitable extinguishing media:** Do not use water jet.

**Special hazards arising from the substance or mixture:** Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous Combustion Products:** Combustion products may include the following:

carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

**Advice for firefighters:** Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

**Further Information**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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**Section 6: Accidental Release Measures**

**Personal Precautions, Protective Equipment and Emergency Procedures:** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

**Methods and materials for containment and cleaning up** Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Reference to other sections

## Section 7: Handling and Storage

**Precautions for safe handling** Put on appropriate personal protective equipment (see Section 8). Avoid breathing vapor or mist. Avoid contact of spilled material and runoff with soil and surface waterways. Avoid prolonged or repeated contact with skin. During metal working, solid particles from workpieces or tools will contaminate the fluid and may cause abrasions of the skin. Where such abrasions result in a penetration of the skin, first aid treatment should be applied as soon as reasonably possible. The presence of certain metals in the workpiece or tool, such as chromium, cobalt and nickel, can contaminate the metalworking fluid and as a result may induce allergic skin reactions. Evaporation of water from soluble cutting fluids during use may lead to an increase in concentration which may result in the development of skin conditions due to irritation and defatting. It is important to monitor fluid strength on a regular basis with a refractometer and maintain it at the recommended concentration. Lubricants from other sources and other contaminants should be minimized. Swarf and other debris should be removed. To maintain optimum performance and minimize bacterial spoilage, machine tool coolant systems should be cleaned on a regular basis. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. DO NOT ADD NITRITES TO THIS FLUID.

## Section 8: Exposure Controls/Personal Protection Exposure Limits

Component	ACGIH TLV (USA) / Exposure Limits
Triethanolamine	5 mg/m <sup>3</sup> 8 hours. (TWA)
Borates, tetra, sodium salts-anhydrous	STEL: 6 mg/m <sup>3</sup> 15 minutes. Form: Inhalable fraction TWA: 2 mg/m <sup>3</sup> 8 hours. Form: Inhalable fraction

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

### Personal protective equipment

**Eye/face protection-** Undiluted fluid: Chemical goggles.

Diluted fluid: Safety glasses with side shields. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Skin protection-** Wear suitable gloves. Undiluted fluid: Wear chemical resistant gloves. Recommended: nitrile gloves.

Diluted fluid: Wear protective gloves if prolonged or repeated contact is likely. Recommended: nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions

### Body Protection

Use of protective clothing is good industrial practice.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or

if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions

**Control of environmental exposure:** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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## Section 9: Physical and Chemical Properties

**Physical state:** Liquid  
**Color:** Clear Yellow. Amber  
**Odor:** No data available  
**Odor Threshold:** No data available  
**pH:** 9.15 [Conc. (%w/w):5%]  
**Melting Point:** No data available  
**Boiling Point:** No data available  
**Flash Point:** Closed cup: >100°C (>212°F) [Estimated. Water content interferes with flash point determination.]  
**Relative evaporation rate:** No data available  
**Flammability (solid, gas):** No data available  
**Explosion limits:** No data available  
**Explosive properties** No data available  
**Oxidizing properties** No data available  
**Vapor pressure:** No data available  
**Vapor density:** No data available  
**Relative density:** >1000 kg/m<sup>3</sup> (>1g/cm<sup>3</sup>) at 15°C  
**Water Solubility:** Soluble in water  
**Auto-ignition temperature:** No data available  
**Decomposition temperature:** No data available  
**Viscosity:** No data available  
**Explosive properties:** No data available  
**Oxidizing properties:** No data available

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## Section 10: Stability and Reactivity

**Reactivity:** No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

**Chemical stability:** The product is stable.

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

**Conditions to avoid:** High temperatures

**Incompatibilities:** Reactive or incompatible with the following materials: oxidizing materials.

**Hazardous Decomposition Products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Section 11: Toxicological Information:****Information on toxicological effects****Classification**

Product/Ingredient	OSHA	IARC	NTP
Triethanolamine	-	3	-

Descriptors:	OSHA: +- potential occupational carcinogen	IARC: 1-Carcinogenic to human. 2A-Probably human carcinogen. 2B-possible carcinogen to human. 3-Not classifiable as a human carcinogen. 4-Probably not a human carcinogen.	NTP: Proven-known to be human carcinogens Possible-Reasonably anticipated to be human carcinogens.
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**Information on the likely routes of exposure:** Routes of entry anticipated: Dermal, Inhalation.

**Potential acute health effects:**

<b>Eye contact</b>	No known significant effects or critical hazards.
<b>Skin contact</b>	No known significant effects or critical hazards.
<b>Inhalation</b>	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<b>Ingestion</b>	No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

<b>Eye contact</b>	No specific data.
<b>Skin contact</b>	Adverse symptoms may include the following: irritation, dryness, cracking
<b>Inhalation</b>	No specific data.
<b>Ingestion</b>	No specific data.

**Delayed and immediate effects and also chronic effects from short and long term exposure****Short term exposure**

<b>Potential immediate effects</b>	Not available.
<b>Potential delayed effects</b>	Not available

**Long term exposure**

<b>Potential immediate effects</b>	Not available.
<b>Potential delayed effects</b>	Not available

**Potential chronic health effects**

<b>General</b>	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	No known significant effects or critical hazards.
<b>Mutagenicity</b>	No known significant effects or critical hazards.
<b>Teratogenicity</b>	No known significant effects or critical hazards.
<b>Developmental effects</b>	No known significant effects or critical hazards.
<b>Fertility effects</b>	No known significant effects or critical hazards.

**Numerical measures of toxicity****Acute toxicity estimates**

**Route:** Oral      ATE Value 100045.6 mg/kg

**Additional information:** Alkanolamine: This product contains an alkanolamine. In all metalworking fluids containing amines, there is a potential for forming nitrosamines which are animal carcinogens. Therefore, no nitrites or related nitrosating agents should be added to such compositions.

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### Section 12: Ecological Information

**Toxicity-** No testing has been performed by the manufacturer.  
**Persistence and degradability:** Expected to be biodegradable.  
**Bioaccumulative potential:** No data available  
**Mobility in soil:** No data available  
**Mobility:** Liquid. Soluble in Water  
**Other adverse effects:** No known significant effects or critical hazards.

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### Section 13: Disposal Considerations

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Diluted Fluid The spent diluted fluid comprises a relatively stable emulsion. Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques (e.g. emulsion splitting, coagulation and filtration) approved by the local authority. Spent fluid should never be disposed of down the drain. The aqueous phase should not be discharged into sewage systems unless provided for by local regulations; the non-aqueous phase should be disposed of as undiluted fluid. Note that separated aqueous solutions or effluents may contain metal salts as well as traces of oil and must be checked for conformity in these respects against consents given by the authorities before disposal. Further treatment may be required.

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### Section 14: Transportation Information

#### Department of Transportation (DOT, United States of America)

UN number: Not regulated  
UN Proper Shipping Name: -  
Class: -  
Packing group: -  
Environmental hazards- No  
Additional: Special Provisions NOT REGULATED

#### TDG Classification

UN number: Not regulated  
UN Proper Shipping Name-  
Class:-  
Packing group:-  
Environmental hazards - No  
Additional -

#### IMDG and IATA

UN number: 3082  
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Poly quaternary ammonium chloride)  
Class: 5.1 (9)  
Packing group: III  
Environmental hazards – Yes  
Additional: This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4. 1.1.4 to 4.1.1.8.

**Special precautions for user:** Not available

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:** Not available

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## Section 15: Regulatory Information

### U.S. Federal regulations

**United States inventory (TSCA8b)** All components are listed or exempted

### SARA 302/304 Components

The following components are subject to reporting levels established by SARA Title III, Section 302:

No products were found

### SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Not applicable

### State regulations

**Massachusetts** The following components are listed: TRIETHANOLAMINE; BORON SODIUM OXIDE

**Pennsylvania** The following components are listed: ETHANOL, 2,2',2''-NITRILOTRIS-; BORON SODIUM OXIDE (B4NA2O7)

**New Jersey** The following components are listed: TRIETHANOLAMINE; ETHANOL, 2,2',2''-NITRILOTRIS-; BORATE COMPOUNDS, Inorganic

### California Prop. 65

**WARNING:** This product contains a chemical known to the State of California to cause cancer.

2,2'-iminodiethanol; 1,4-dioxane; Propylene oxide; bis(2-chloroethyl) ether

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ethylene oxide

### Other regulations

All components are listed or exempted.

**Australia inventory (AICS)**

All components are listed or exempted.

**Canada inventory**

All components are listed or exempted.

**China inventory (IECSC)**

All components are listed or exempted.

**Japan inventory (ENCS)**

All components are listed or exempted.

**Korea inventory (KECI)**

All components are listed or exempted.

**Philippines inventory**

All components are listed or exempted.

**(PICCS)**

**Taiwan inventory (CSNN)** All components are listed or exempted.

**REACH Status**

For the REACH status of this product please consult your company contact, as identified in

Section 1.

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## Section 16: Other Information

### HMIS Rating

Health: 1

Flammability: 1

Physical Hazards: 0

Personal Protection: B

### NFPA Rating

Health: 1

Flammability: 1

Reactivity: 0

Special: None

**Disclaimer:** The information above is believed to be accurate and represents the best information currently available to us.

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