



## Material Safety Data Sheet

Date Printed: 05/20/2008  
Date Updated: 02/03/2006  
Version 1.40

### Section 1 - Product and Company Information

**Product Name** JP-8 MILITARY FUEL STANDARD, 1X1ML, CH<sub>2</sub>CL<sub>2</sub>, 10MG/ML  
**Product Number** 47587-U  
**Brand** Supelco Chemical  
**Company** Sigma-Aldrich  
**Street Address** 3050 Spruce Street  
**City, State, Zip, Country** SAINT LOUIS, MO 63103 US  
**Technical Phone:** 800-325-5832  
**Fax:** 800-325-5052  
**Emergency Phone:** 314-776-6555

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>OSHA</u>	<u>SARA 313</u>	<u>EC no</u>	<u>Annex I Index Number</u>
JP-8 MILITARY FUEL STANDARD	None	Yes	Yes		
<u>Ingredient Name</u>	<u>CAS #</u>	<u>Percent</u>	<u>OSHA</u>	<u>SARA 313</u>	
DICHLOROMETHANE	75-09-2	>= 99.000 % <= 100.000 %	Yes	Yes	
KEROSENE	8008-20-6	1.000 %		No	
<b>Formula</b>					
<b>Synonyms</b>					

### Section 3 - Hazards Identification

#### Emergency Overview

Toxic.  
Possible risk of harm to the unborn child. May cause cancer. Harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin.

Target organ: central nervous system because of possible dizziness, headache, loss of consciousness and death at high concentrations. Target organ: heart because methylene chloride is converted to carbon monoxide in the body. Readily absorbed through skin. OSHA carcinogen. Confirmed Carcinogen (US).

#### HMS Rating

Health: 2\* Flammability: 1 Reactivity: 0

#### NFPA Rating

Health: 2 Flammability: 1 Reactivity: 0

\*additional chronic hazards present

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

#### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Dermal Exposure

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

### Section 5 - Fire Fighting Measures

**Autoignition Temp:** N/A

#### Extinguishing Media

##### Suitable

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be effective. Cool all affected containers with flooding quantities of water.

#### Firefighting

##### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

##### Specific Hazard(s)

Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

#### Procedure to be Followed in Case of Leak or Spill

Evacuate area.

#### Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use.

#### Methods for Cleaning Up

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Do not breathe vapor. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure. For protection and handling requirements consult CFR title 29 part 1910.1052.

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**Storage**  
**Suitable**

Store under inert gas. Keep tightly closed.

**Special Requirements**  
Store under inert gas.

## Section 8 - Exposure Controls / PPE

**Engineering Controls**

Use only in a chemical fume hood. Safety shower and eye bath.

**Personal Protective Equipment**

**Respiratory**

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Use supplied-air or SCBA respirators. Europe permits the use of type AXBEK fullface cartridge respirators (EN 14387).

**Hand**

Compatible chemical-resistant gloves.

**Eye**

Chemical safety goggles.

**General Hygiene Measures**

Wash contaminated clothing before reuse. Wash thoroughly after handling.

## Section 9 - Physical/Chemical Properties

**Appearance**

**Physical State**

Liquid

**Molecular Weight** N/A

**pH** N/A

**BP/BP Range** N/A

**MP/MP Range** N/A

**Freezing Point** N/A

**Vapor Pressure** N/A

**Vapor Density** N/A

**Saturated Vapor Conc.** N/A

**SG/Density** N/A

**Bulk Density** N/A

**Odor Threshold** N/A

**Volatile%** N/A

**VOC Content** N/A

**Water Content** N/A

**Solvent Content** N/A

**Evaporation Rate** N/A

**Viscosity** N/A

**Partition Coefficient** N/A

**Decomposition Temp.** N/A

**Flash Point °F** N/A

**Flash Point °C** N/A

**Explosion Limits** N/A

**Flammability** N/A

**Autoignition Temp** N/A

**Solubility** N/A

**N/A = not available**

## Section 10 - Stability and Reactivity

**Stability**

**Stable**

Stable.

**Conditions to Avoid**

Heat.

**Materials to Avoid**

Aluminum, Alkali metals.

**Hazardous Decomposition Products**

**Hazardous Decomposition Products**

Phosgene gas, Carbon monoxide, Carbon dioxide, Hydrogen chloride gas

**Hazardous Polymerization**

**Hazardous Polymerization**

Will not occur.

## Section 11 - Toxicological Information

**Route of Exposure**

**Skin Contact**

Causes skin irritation.

**Skin Absorption**

May be harmful if absorbed through the skin.

**Eye Contact**

Causes eye irritation.

**Inhalation**

May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

**Ingestion**

Harmful if swallowed.

**Target Organ(s) or System(s)**

Target organ: heart because methylene chloride is converted to carbon monoxide in the body. Target organ: central nervous system because of possible dizziness, headache, loss of consciousness and death at high concentrations. Liver. Pancreas.

**Signs and Symptoms of Exposure**

Dichloromethane is metabolized in the body producing carbon monoxide which increases and sustains carboxyhemoglobin levels in the blood, reducing the oxygen-carrying capacity of the blood. A simple asphyxiant, exposure can cause anesthetic action, difficulty in breathing, headache, and dizziness. Prolonged or repeated contact with skin can cause defatting and dermatitis. Contact with eyes can cause redness, tearing, and blurred vision. Ingestion may cause gastrointestinal irritation. CNS depression. Paresthesia. Somnolence. Convulsions. Conjunctivitis. Pulmonary edema. Effects may be delayed. Irregular breathing. Ingestion can cause gastrointestinal disorders, nausea, and vomiting. Increased liver enzymes. Drowsiness.

**Conditions Aggravated by Exposure**

Existing data suggests that methylene chloride may be a weak mutagen in mammalian systems.

**RTECS Number:** N/A

**Chronic Exposure - Carcinogen**

Result: This is or contains a component that has been reported to be carcinogenic based on its IARC, OSHA, ACGIH, NTP, or EPA classification.

**Chronic Exposure - Teratogen**

Result: Possible risk of congenital malformation in the fetus.

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

### Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.  
Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

### DOT

**Proper Shipping Name:** Dichloromethane  
**UN#:** 1593  
**Class:** 6.1  
**Packing Group:** Packing Group III  
**Hazard Label:** Toxic Substance  
**PIH:** Not PIH

### IATA

**Proper Shipping Name:** Dichloromethane  
**IATA UN Number:** 1593  
**Hazard Class:** 6.1  
**Packing Group:** III

## Section 15 - Regulatory Information

### EU Additional Classification

**Symbol of Danger:** T

**Indication of Danger**

Toxic

**Risk Statements** **R:** 36/37/38 20/22 45 63

Irritating to eyes, respiratory system and skin. Harmful by inhalation and if swallowed. May cause cancer. Possible risk of harm to the unborn child.

**Safety Statements** **S:** 53 45 36/37/39 23

Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Wear suitable protective clothing, gloves, and eye/face protection. Do not breathe vapor.

### US Classification and Label Text

**Indication of Danger**

Toxic

**Risk Statements**

Possible risk of harm to the unborn child. May cause cancer. Harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin.

**Safety Statements**

Wear suitable protective clothing, gloves, and eye/face protection. Avoid exposure - obtain special instructions before use. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Do not breathe vapor.

**US Statements**

Target organ: central nervous system because of possible dizziness, headache, loss of consciousness and death at high concentrations. Target organ: heart because methylene chloride is converted to carbon monoxide in the body. Readily absorbed through skin. OSHA carcinogen. Confirmed Carcinogen (US).

### United States Regulatory Information

**SARA Listed:** Yes

**Notes:** This product is or contains a component that is subject to SARA313 reporting requirements.

### OSHA Remarks

OSHA regulated - see CFR title 29 part 1910.1052.

### United States - State Regulatory Information

**California Prop - 65**

This product is or contains chemical(s) known to the state of California to cause cancer.

### Canada Regulatory Information

#### WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** No

**NDSL:** No

## Section 16 - Other Information

### Disclaimer

For R&D use only. Not for drug, household or other uses.

### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. SigmaAldrich Inc., shall not be held liable for any damage resulting from handling or form contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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