STODDARD SOLVENT

1. Product Identification

Synonyms: White spirits; Mineral spirits type I; Petroleum distillate
CAS No.: 8052-41-3
Molecular Weight: Not applicable to mixtures.
Chemical Formula: > 65% C10 or higher hydrocarbons
Product Codes: V110

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS No</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoddard Solvent</td>
<td>8052-41-3</td>
<td>98 - 100%</td>
<td>Yes</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview

-------------------------------
DANGER! HARMFUL OR FATAL IF SWALLOWED. AFFECTS CENTRAL NERVOUS SYSTEM.
MAY AFFECT KIDNEYS. FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. CAUSES
IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

SAF-T-DATA(tm) Ratings (Provided here for your convenience)

-------------------------------------------------------------------------
Health Rating: 2 - Moderate (Life)
Flammability Rating: 2 - Moderate
Reactivity Rating: 1 - Slight
Contact Rating: 3 - Severe
Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES;
CLASS B EXTINGUISHER
Storage Color Code: Red (Flammable)
-------------------------------------------------------------------------
Potential Health Effects
----------------------------------

Inhalation:
Effects are typically those of most hydrocarbons, dizziness and euphoria leading to unconsciousness in severe cases. Vapors also irritate the respiratory tract. Symptoms may include coughing, difficult breathing and chest pain. A central nervous system depressant.

Ingestion:
Fatal dose for humans estimated at 3-4 oz, but ingestion of much smaller amounts may cause lung edema and possible death because of aspiration into lungs.

Skin Contact:
The defatting action of this solvent may lead to soreness, inflammation and, possibly, dermatitis.

Eye Contact:
Vapors may be irritating at concentrations of 450 ppm and above (15 minutes exposure) and contact with the liquid solvent can be painful and possibly damaging to eye tissues.

Chronic Exposure:
Chronic exposure may lead to central nervous system complications, blood changes (aplastic anemia, a rare occurrence that is potentially fatal), and dermatitis. Animal studies have indicated the potential for liver and kidney damage.

Aggravation of Pre-existing Conditions:
Persons with pre-existing skin disorders or eye problems or impaired kidney function may be more susceptible to the effects of the substance.

4. First Aid Measures

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:
Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately.

Skin Contact:
Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:
Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:
Flash point: 38C (100F) CC
Autoignition temperature: 232 - 260C (450 - 500F)
Flammable limits in air % by volume:
lel: 0.8; uel: ca. 6
Flammable.

This liquid is near its lower flammability limit at room temperature. Flash point may range between 38-40 C. Contact with strong oxidizers may cause fire.

Explosion:
Above flash point, vapor-air mixtures are explosive within flammable limits noted above. Sealed containers may rupture when heated. Sensitive to static discharge.

Fire Extinguishing Media:
Water spray, dry chemical, alcohol foam, or carbon dioxide. Direct stream of water can scatter and spread flames.
6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer! If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

J. T. Baker SOLUSORB® solvent adsorbent is recommended for spills of this product.

7. Handling and Storage

Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Outside or detached storage is preferred. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be No Smoking areas. Use non-sparking type tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Do Not attempt to clean empty containers since residue is difficult to remove. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:
-OSHA Permissible Exposure Limit (PEL): 500 ppm (TWA)

-ACGIH Threshold Limit Value (TLV): 100 ppm (TWA)

Ventilation System:
A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details. Use explosion-proof equipment.

Personal Respirators (NIOSH Approved):
If the exposure limit is exceeded and engineering controls are not feasible, a half-face organic vapor respirator may be worn for up to ten times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece organic vapor respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-face piece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:
Rubber or neoprene gloves and additional protection including impervious boots, apron, or coveralls, as needed in areas of unusual exposure.
9. Physical and Chemical Properties

**Appearance:**
Clear, colorless liquid.

**Odor:**
Kerosene-like.

**Solubility:**
Insoluble in water.

**Density:**
0.79

**pH:**
No information found.

% Volatiles by volume @ 21C (70F):
100

**Boiling Point:**
156 - 202C (313 - 396F)

**Melting Point:**
No information found.

**Vapor Density (Air=1):**
4.8

**Vapor Pressure (mm Hg):**
ca. 5 @ 25C (77F)

**Evaporation Rate (BuAc=1):**
ca. 0.08

10. Stability and Reactivity

**Stability:**
Stable under ordinary conditions of use and storage.

**Hazardous Decomposition Products:**
Carbon dioxide and carbon monoxide may form when heated to decomposition.

**Hazardous Polymerization:**
Will not occur.

**Incompatibilities:**
Strong acids, strong oxidizers.

**Conditions to Avoid:**
Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Eye - Standard Draize Test Rabbit, Dose: 500 mg/24H; Reaction: Moderate

---\Cancer Lists\---------------------------------------------
---NTP Carcinogen---

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Known</th>
<th>Anticipated</th>
<th>IARC Category</th>
</tr>
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<td>No</td>
<td>No</td>
<td>None</td>
</tr>
</tbody>
</table>
12. Ecological Information

Environmental Fate:
No information found.

Environmental Toxicity:
No information found.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)

-----------------------------------------------
Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S. (STODDARD SOLVENT)
Hazard Class: 3
UN/NA: UN1268
Packing Group: III
Information reported for product/size: 20L

International (Water, I.M.O.)

-----------------------------------------------
Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S. (STODDARD SOLVENT)
Hazard Class: 3
UN/NA: UN1268
Packing Group: III
Information reported for product/size: 20L

15. Regulatory Information

--------\Chemical Inventory Status - Part 1\-----------------------------------------------
Ingredient                                         TSCA  EC  Japan  Australia
Stoddard Solvent (8052-41-3)                        Yes  Yes  No    Yes

--------\Chemical Inventory Status - Part 2\-----------------------------------------------
Ingredient                                         Korea DSL NDSL Phil.
Stoddard Solvent (8052-41-3)                        Yes  Yes  No     Yes

--------\Federal, State & International Regulations - Part 1\-------------------------------
Ingredient                                         -SARA  302-  -SARA  313-
Stoddard Solvent (8052-41-3)                        RQ   TPQ   List Chemical Catg.

--------\Federal, State & International Regulations - Part 2\-------------------------------
### Ingredient: Stoddard Solvent (8052-41-3)

<table>
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<th>Ingredient</th>
<th>CERCLA</th>
<th>-RCRA-</th>
<th>-TSCA-</th>
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**Chemical Weapons Convention:** No  
**TSCA 12(b):** No  
**CDTA:** No  
**SARA 311/312:** Acute: Yes  Chronic: Yes  
**Fire:** Yes  **Pressure:** No  
**Reactivity:** No  

(Pure / Liquid)

**Australian Hazchem Code:** 3[Y]E  
**Poison Schedule:** S5  
**WHMIS:**  
This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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### 16. Other Information

**NFPA Ratings:**  
Health: 3  
Flammability: 2  
Reactivity: 0

**Label Hazard Warning:**  
DANGER! HARMFUL OR FATAL IF SWALLOWED. AFFECTS CENTRAL NERVOUS SYSTEM. MAY AFFECT KIDNEYS. FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

**Label Precautions:**  
Keep away from heat, sparks and flame. Avoid breathing vapor. Keep container closed.  
Use only with adequate ventilation. Avoid contact with eyes, skin and clothing.

**Label First Aid:**  
Aspiration hazard. If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention.

**Product Use:** Laboratory Reagent.

**Revision Information:** No Changes.

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continued
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Prepared by: Environmental Health & Safety