1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product code: US511
Product Name: CHLOROFORM, STABILIZED WITH AMYLENEEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
Chemical Name: Chloroform
Synonyms:
- CHLOROFORME (French)
- CHLOROFORMO (TRICLOROMETANO) (Spanish)
- FORMYL TRICHLORIDE
- METHANE TRICHLORIDE
- METHANE, TRICHLORO-
- METHENYL CHLORIDE
- METHENYL TRICHLORIDE
- METHYL TRICHLORIDE
- TRICHLOROFORM
- TRICHLOROMETHANE

Recommended use: Solvent. Chemical intermediate.
CAS #: 67-66-3
RTECS #: FS9100000
Formula: CHCl3
CI#: Not available
Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000
Order Online At: https://www.spectrumchemical.com
Emergency Telephone Number: CHEMTREC: 1-800-424-9300
Contact Person: Regina Wachenheim (East Coast)
Contact Person: Martin LaBenz (West Coast)

2. HAZARDS IDENTIFICATION

See Section 8.
2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
WARNING!
May be harmful if swallowed
WARNING! IRRITANT
Irritating to eyes
Irritating to skin

Chronic Potential Health Effects:
Component Carcinogen Status:
Chloroform 67-66-3 (>99.9)
A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans by ACGIH
Group 2B - Possibly Carcinogenic to Humans by IARC
Reasonably Anticipated To Be A Human Carcinogen by NTP
Present by OSHA

Amylene 25377-72-4 (<0.1)
No information available

Target Organs:

OSHA Regulatory Status
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

POTENTIAL HEALTH EFFECTS

Principal Routes of Exposure:
Inhalation. Ingestion.

Acute Potential Health Effects:

Skin Contact:
Causes skin irritation. Mildly to highly irritating. It may be absorbed through the skin.

Eye Contact:
Causes eye irritation. Moderately irritating to the eyes. Causes conjunctivitis. May cause reversible eye damage.

Inhalation:
Irritating to respiratory system. May cause nausea and vomiting. May cause anorexia. May cause salivation. May cause headache. Inhalation of high concentrations may cause loss of consciousness (anesthesia). Inhalation of high concentrations of vapors may cause central nervous system depression. May cause central nervous system effects. May affect respiration. May cause cardiovascular effects. May affect the liver. May affect the urinary system. It may affect the blood. May cause hyperglycemia. May cause ketosis. It may affect the spleen.

Ingestion:
Causes digestive (gastrointestinal) tract irritation. May affect the liver. It may affect the kidneys. May affect the cardiovascular system. May affect the blood.

Odor:

Physical state:
Not determined.

Appearance:
No information available

Color:
No information available
Mutagenic Effects: May affect genetic material
Mutations in microorganisms
Experiments with bacteria and/or yeast have shown mutagenic effects
Mutagenic effects in mammalian somatic cells
Animal experiments showed mutagenic effects

Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data

Aggravated Medical Conditions: No information available

See Section 11 for additional Toxicological Information

POTENTIAL ENVIRONMENTAL EFFECTS

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>67-66-3</td>
<td>&gt;99.9</td>
</tr>
<tr>
<td>Amylene</td>
<td>25377-72-4</td>
<td>&lt;0.1</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

General Advice: Poison information centres in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required.

Notes to Physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties

Flashpoint (°C/°F): Not applicable. The product is not flammable.

Flash Point Tested according to: Not applicable

Lower Explosion Limit (%): Not applicable

Product code: US511

Product name: CHLOROFORM, STABILIZED WITH AMYLENE EXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
Upper Explosion Limit (%): Not applicable

Autoignition Temperature (°C/°F): Not applicable.

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable Extinguishing Media: No information available.

Hazardous Combustion Products: It doesn't burn itself, but may decompose upon heating to produce corrosive and toxic fumes of carbon monoxide; carbon dioxide, phosgene, hydrogen chloride and chlorine

Specific hazards: When heated to decomposition it may produce corrosive and/or toxic fumes

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

Specific Methods: No information available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for Cleaning Up: Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container.

7. HANDLING AND STORAGE

Handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Keep away from incompatible materials.

Safe Handling Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not ingest. Protect from light.

Storage


Product code: US511  Product name: CHLOROFORM, STABILIZED WITH AMYLENEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
Incompatible Materials:
Oxidizing agents. Acids. Alkalis. Aluminum. Potassium t-butoxide. Alkali Metals. Lithium. Sodium. Potassium. Alkaline Earth metals. Magnesium. Chloroform reacts violently with or may explode if it comes in contact with the following: Perchloric acid + Methanol; Sodium + Methanol; Sodium methylate + Methanol; Sodium hydroxide + Methanol; Acetone; Carbon tetrachloride; disilane; Nitrogen tetroxide; Sodium methylate; Sodium-Potassium alloy; Triisopropyl phosphine; 2-Nitrophenylacetyl chloride; Perchloric acid + Phosphorus pentoxide.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Personal Protective Equipment

Eye protection: Goggles.


Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product.

National occupational exposure limits

United States

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform - 67-66-3</td>
<td>50 ppm Ceiling</td>
<td>2 ppm STEL</td>
<td>10 ppm TWA</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>240 mg/m³ Ceiling</td>
<td>9.78 mg/m³ STEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amylene - 25377-72-4</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Canada

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform 67-66-3</td>
<td>10 ppm TWA</td>
<td>2 ppm TWA</td>
<td>10 ppm TWA</td>
<td>5 ppm TWA EV</td>
</tr>
<tr>
<td></td>
<td>49 mg/m³ TWA</td>
<td></td>
<td></td>
<td>24.4 mg/m³ TWA EV</td>
</tr>
<tr>
<td>Amylene 25377-72-4</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Australia and Mexico

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform 67-66-3</td>
<td>2 ppm TWA</td>
<td>10 ppm TWA</td>
</tr>
<tr>
<td></td>
<td>10 mg/m³ TWA</td>
<td>50 mg/m³ TWA</td>
</tr>
<tr>
<td>Amylene 25377-72-4</td>
<td>None</td>
<td>50 ppm STEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>225 mg/m³ STEL</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

Product code: US511
Product name: CHLOROFORM, STABILIZED WITH AMYLENEEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
## 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor:</th>
<th>Molecular/Formula weight:</th>
<th>Taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant, Etheric, Non-irritating</td>
<td>119.38</td>
<td>Sweet</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash point (°C):</th>
<th>Lower Explosion Limit (%):</th>
<th>Upper Explosion Limit (%):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Autoignition Temperature (°C/°F):</th>
<th>Melting point/range(°C/°F):</th>
<th>Boiling point/range(°C/°F):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>-64 to -63 °C/-83.26-81.4 °F</td>
<td>61-62 °C/141.8-143.6 °F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH:</th>
<th>Specific gravity:</th>
<th>Density (g/cm3):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>1.484 @ 20 °C</td>
<td>No information available</td>
</tr>
<tr>
<td>1.476-1.481 @ 25 °C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decomposition temperature(°C/°F):</th>
<th>Bulk density:</th>
<th>Vapor pressure @ 20°C (kPa):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>21.2-21.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaporation rate:</th>
<th>Vapor density:</th>
<th>VOC content (g/L):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>4.36</td>
<td>No information available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor threshold (ppm):</th>
<th>Partition coefficient (n-octanol/water):</th>
<th>Miscibility:</th>
</tr>
</thead>
<tbody>
<tr>
<td>85</td>
<td>No information available</td>
<td>Miscible with Carbon disulfide</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility:</th>
<th>Partition coefficient (n-octanol/water):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slightly soluble in water</td>
<td>No information available</td>
</tr>
<tr>
<td>Soluble in Ether</td>
<td></td>
</tr>
<tr>
<td>Soluble in Benzene</td>
<td></td>
</tr>
<tr>
<td>Soluble in alcohol</td>
<td></td>
</tr>
<tr>
<td>Soluble in Acetone</td>
<td></td>
</tr>
<tr>
<td>Soluble in Carbon tetrachloride</td>
<td></td>
</tr>
<tr>
<td>Soluble in organic solvents</td>
<td></td>
</tr>
<tr>
<td>Soluble in Petroleum Ether</td>
<td></td>
</tr>
<tr>
<td>Soluble in Carbon Disulfide</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decomposition temperature(°C/°F):</th>
<th>Bulk density:</th>
<th>Vapor pressure @ 20°C (kPa):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>21.2-21.3</td>
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</table>

<table>
<thead>
<tr>
<th>Evaporation rate:</th>
<th>Vapor density:</th>
<th>VOC content (g/L):</th>
</tr>
</thead>
<tbody>
<tr>
<td>No information available</td>
<td>4.36</td>
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<tbody>
<tr>
<td>85</td>
<td>No information available</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility:</th>
<th>Partition coefficient (n-octanol/water):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slightly soluble in water</td>
<td>No information available</td>
</tr>
<tr>
<td>Soluble in Ether</td>
<td></td>
</tr>
<tr>
<td>Soluble in Benzene</td>
<td></td>
</tr>
<tr>
<td>Soluble in alcohol</td>
<td></td>
</tr>
<tr>
<td>Soluble in Acetone</td>
<td></td>
</tr>
<tr>
<td>Soluble in Carbon tetrachloride</td>
<td></td>
</tr>
<tr>
<td>Soluble in organic solvents</td>
<td></td>
</tr>
<tr>
<td>Soluble in Petroleum Ether</td>
<td></td>
</tr>
<tr>
<td>Soluble in Carbon Disulfide</td>
<td></td>
</tr>
</tbody>
</table>

## 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Stability:</th>
<th>Stable at normal conditions</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Conditions to avoid:</th>
<th>Incompatible Materials:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heat. Exposure to light. Incompatible materials.</td>
<td>Oxidizing agents. Acids. Alkalis. Aluminum. Potassium t-butoxide. Alkali Metals. Lithium. Sodium. Potassium. Alkaline Earth metals. Magnesium. Chloroform reacts violently with or may explode if it comes in contact with the following: Perchloric acid + Methanol; Sodium + Methanol; Sodium methylate + Methanol; Sodium hydroxide + Methanol; Acetone; Carbon tetrachloride; disilane; Nitrogen tetroxide; Sodium methylate; Sodium-Potassium alloy; Triisopropyl phosphine; 2-Nitrophenylacetyl chloride; Perchloric acid + Phosphorus pentoxide.</td>
</tr>
</tbody>
</table>

Product code: US511  
Product name: CHLOROFORM, STABILIZED WITH AMYLENEEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
Hazardous decomposition products:

Possibility of Hazardous Reactions:
Chloroform reacts violently with or may explode if it comes in contact with the following: Perchloric acid + Methanol; Sodium + Methanol; Sodium methylate + Methanol; Sodium hydroxide + Methanol; Acetone; Carbon tetrachloride; disilane; Nitrogen tetroxide; Sodium methylate; Sodium-Potassium alloy; Trisopropyl phosphine; 2-Nitrophenylacetyl chloride; Perchloric acid + Phosphorus pentoxide

Polymerization:
Hazardous polymerisation does not occur

Corrosivity:
No information available

Special Remarks on Corrosivity:
No information available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

Chloroform - 67-66-3
LD50/oral/rat = 695 mg/kg Oral LD50 Rat
LD50/oral/mouse = 36 mg/kg (RTECS)
36-460 mg/kg (European Commission IUCLID Dataset)
353-1366 mg/kg (European Commission IUCLID Dataset)
LD50/dermal/rat = No information available
LD50/dermal/rabbit = 20 g/kg Dermal LD50 Rabbit
>3980 mg/kg (LOLI; European Commission IUCLID Dataset)
LC50/inhalation/rat = 47702 mg/m³ Inhalation LC50 Rat 4 h
LC50/inhalation/mouse = 17200 mg/m³ 2 h
6000 mg/m³ 6 h
Other LD50 or LC50 information = 820 mg/kg Oral LD50 Guinea Pig

Amylene - 25377-72-4
LD50/oral/rat = No information available
LD50/oral/mouse = No information available
LD50/dermal/rat = No information available
LD50/dermal/rabbit = No information available
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = No information available

Product Information

LC50/inhalation/rat 47702 mg/m³ 4 h
LC50/inhalation/mouse 17200 mg/m³ 2 h
6000 mg/m³ 6 h
LD50/dermal/rabbit > 3980 mg/kg
mg/kg
LD50/dermal/rat No information available
LD50/oral/mouse = No information available mg/kg
LD50/oral/rat = 695 mg/kg

Local Effects

Product code: US511
Product name: CHLOROFORM, STABILIZED WITH AMYLENEEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
Skin irritation: Causes skin irritation. Mildly to highly irritating. May cause burning sensation or stinging, redness, and inflammation of the skin.


Inhalation: Irritating to respiratory system. May cause nausea, vomiting. May cause salivation. May cause dry mouth, thirst. May cause dizziness and headache. Inhalation of high concentrations of vapor may cause anesthetic effects. May affect behavior/central nervous system (excitation, followed by central nervous system depression, nervousness, irritability, hallucinations, delirium, euphoria, apathy, ataxia, loss of judgement, disorientation, inebriation, fatigue, lassitude, mental dullness, weakness, narcosis, fainting sensation, unconsciousness (anesthesia), coma). It may affect the cardiovascular system (hypotension, cardiac arrhythmias, cardiac arrest). May affect respiration (respiratory depression). May affect respiration (anoxia, increase in rate and depth of respiration). May cause anorexia. It may affect the liver. May affect the kidneys. May produce a sensation of bodily warmth. May cause pupillary dilation with decreased reaction to light.

Ingestion: May be harmful if swallowed. Causes digestive (gastrointestinal) tract irritation. It causes irritation or a burning sensation of the mouth and throat. May affect urinary system (kidneys). May affect liver. It may affect the blood (leukocytosis, fall in the plasma prothrombin level and an increase in time for the blood to clot).

Sensitization: No information available

Chronic Toxicity

Prolonged or repeated inhalation may cause pneumoconiosis. Prolonged or repeated inhalation may cause dry mouth, thirst, gastroenteritis, nausea, vomiting, diarrhea, loss of appetite or anorexia, weight loss. Prolonged or repeated inhalation may affect behavior/central nervous system (headache, hallucinations, ataxia, loss of reflexes, psychotic behavior, dysarthria (motor speech disorder)), and cause degenerative changes of the brain. Prolonged or repeated inhalation may affect the heart. Prolonged or repeated inhalation may affect the kidneys. Prolonged or repeated inhalation may affect the liver, and kidneys. Prolonged or repeated ingestion may cause weight loss. Prolonged or repeated ingestion skin contact may cause dermatitis and defatting, dryness, and cracking of the skin. Prolonged or repeated inhalation may affect the blood (changes in white blood cell count). Prolonged or repeated inhalation may affect the blood (change in clotting factors). Prolonged or repeated inhalation may affect the spleen. Prolonged or repeated inhalation may cause hyperglycemia. Prolonged or repeated inhalation may cause ketosis (ketone bodies formed in the blood when liver glycogen stores are depleted).

Carcinogenic effects: May cause cancer based on animal test data. Limited evidence of a carcinogenic effect. Possibly carcinogenic to humans.

<table>
<thead>
<tr>
<th>Components</th>
<th>NTP</th>
<th>IARC</th>
<th>OSHA HCS - Carcinogens</th>
<th>ACGIH - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>Reasonably Anticipated To Be A Human Carcinogen</td>
<td>Group 2B Monograph 73 [1999]</td>
<td>Present</td>
<td>A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Amylene</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Product code: US511 Product name: CHLOROFORM, STABILIZED WITH AMYLENEEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
Mutagenic Effects: May affect genetic material
Experiments with bacteria and/or yeast have shown mutagenic effects
Mutagenic effects in mammalian somatic cells
Animal experiments showed mutagenic effects

Reproductive Effects: May cause adverse reproductive effects based on animal data

Teratogenic Effects: May cause birth defects (teratogenic effects) based on animal test data.


12. ECOLOGICAL INFORMATION

ECOTOXICITY

Toxicity to terrestrial and aquatic plants and animals: Information given is based on data on the components and the ecotoxicology of similar products

Ecotoxicity effects: Aquatic environment.

Aquatic toxicity:

Chloroform - 67-66-3
Freshwater Algae Data: 560 mg/L EC50 Desmodesmus subspicatus 48 h
Freshwater Fish Species Data: 18 mg/L LC50 Lepomis macrochirus 96 h flow-through 1
18 mg/L LC50 Oncorhynchus mykiss 96 h flow-through 1
300 mg/L LC50 Poecilia reticulata 96 h static 1
71 mg/L LC50 Pimephales promelas 96 h flow-through 1
Water Flea Data: 29 mg/L EC50 Daphnia magna 48 h

Mobility: No information available

Persistence and degradability: No information available

Bioaccumulative potential: No information available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging: Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>U044</td>
</tr>
<tr>
<td>Amylene</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
UN-No: UN1888
Proper Shipping Name: Chloroform
Hazard Class: 6.1

Product code: US511 Product name: CHLOROFORM, STABILIZED WITH AMYLENEEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
Packing Group: None
Subsidiary Risk: Not applicable
Marine Pollutant: No data available
ERG No: 151
DOT RQ (lbs): No information available

TDG (Canada)
UN-No: UN1888
Proper Shipping Name: Chloroform
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Description: No information available

ADR
UN-No: UN1888
Proper Shipping Name: Chloroform
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available

IMO / IMDG
UN-No: UN1888
Proper Shipping Name: Chloroform
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-A
MFAG: No information available
Maximum Quantity: No information available

RID
UN-No: UN1888
Proper Shipping Name: Chloroform
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: 6.1
Classification Code: No information available
Description: No information available

ICAO
UN-No: UN1888
Proper Shipping Name: Chloroform
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
Description: No information available

IATA
UN-No: UN1888

Product code: US511
Product name: CHLOROFORM,
STABILIZED WITH
AMYLENEXCEEDS A.C.S.
SPECIFICATIONS, UNISOLV(R)
Proper Shipping Name: Chloroform
Hazard Class: 6.1
Packing Group: III
Subsidiary Risk: No information available
ERG Code: 6A
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>Philippines (PICCS)</th>
<th>KOREA KECL</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>Present</td>
<td>Present</td>
<td>Present KE-34076</td>
<td>Present (2)-37</td>
<td>Present</td>
<td>Present</td>
<td>Present 200-663-8</td>
</tr>
<tr>
<td>Amylene</td>
<td>Present</td>
<td>Present</td>
<td>Present KE-28026</td>
<td>Present (2)-19</td>
<td>Not present</td>
<td>Present</td>
<td>Present 246-916-6</td>
</tr>
</tbody>
</table>

U.S. Regulations

Chloroform
- Massachusetts RTK: Present
- New Jersey RTK Hazardous Substance List: Present
- New Jersey (EHS) List: Present
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- New Jersey TCPA - EHS: 20000lbTQ
- Pennsylvania RTK: Environmental hazard
- Special hazardous substance
- Pennsylvania RTK - Environmental Hazard List: Present
- Pennsylvania RTK - Special Hazardous Substances: Present
- RI RTK - Hazardous Substances List: Present
- Michigan - Critical Materials List: Present
- Minnesota - Hazardous Substance List: Present
- New York Release Reporting - List of Hazardous Substances: 10 lb RQ, 1 lb RQ
- Louisiana Reportable Quantity List for Pollutants: 10lbfinal RQ, 4.54kgfinal RQ
- California Directors List of Hazardous Substances: Present

Amylene
- New Jersey RTK Hazardous Substance List: Present


Chemicals Known to the State of California to Cause Cancer:
WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>carcinogen</td>
<td>Developmental toxicity</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Amylene</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA

Product code: US511

Product name: CHLOROFORM, STABILIZED WITH AMYLENE EXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
### Components

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>10 lb final RQ 4.54 kg final RQ</td>
<td>10 lb EPCRA RQ</td>
<td>None</td>
<td>None</td>
<td>0.1 % de minimis concentration</td>
</tr>
<tr>
<td>Amylene</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>Not Applicable</td>
<td>06/01/1987 06/01/1997</td>
</tr>
<tr>
<td>Amylene</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

### Canada

**WHMIS hazard class:**
- D1B  Toxic materials
- D2A Very toxic materials
- D2B  Toxic materials

**Chloroform**
- D1B  D2A  D2B

**Canada Controlled Products Regulation:**
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

<table>
<thead>
<tr>
<th>Components</th>
<th>WHMIS Ingredient Disclosure List -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>0.1 %</td>
</tr>
</tbody>
</table>

### Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
<tr>
<td>Amylene</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>CEPA Schedule I - Toxic Substances</th>
<th>CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloroform</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>Amylene</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

### EU Classification

**R-phrase(s)**
- R22 - Harmful if swallowed.
- R38 - Irritating to skin.
- R40 - Limited evidence of a carcinogenic effect
- R48/20/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

**S-phrase(s)**
- S36 - Wear suitable protective clothing.
- S37 - Wear suitable gloves.

**Product code:** US511 **Product name:** CHLOROFORM, STABILIZED WITH AMYLENEXCEEDS A.C.S. SPECIFICATIONS, UNISOLV(R)
The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
Xn - Harmful.
Xi - Irritant.

![Xn] ![Xi]

16. OTHER INFORMATION

The MSDS format complies with ANSI Z400.1/Z129.1-2010 standards.

**Preparation Date:** 23-Jan-2014

**Reason for revision:** Not applicable

**Prepared by:** Sonia Owen

**Literature reference:** No information available

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. The physical properties reported in this MSDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**Product code:** US511

**Product name:** CHLOROFORM,
STABILIZED WITH
AMYLENEEXCEEDS A.C.S.
SPECIFICATIONS, UNISOLV(R)