1. Identification

Product identifier: Safetec® Ammonia Inhalants
Other means of identification: Not available.
Recommended use: Not available.
Recommended restrictions: None known.
Manufacturer/Importer/Supplier/Distributor information:
Manufacturer: Safetec of America, Inc.
887 Kensington Avenue
Buffalo, NY 14215
Company Telephone: 1-716-895-1822
E-mail Address: www.safetec.com
Emergency Telephone: 1-800-255-3924
Supplier: Refer to Manufacturer

2. Hazard(s) identification

Physical hazards: Flammable liquids Category 3
Health hazards: Skin corrosion/irritation Category 1
Serious eye damage/eye irritation Category 1
Environmental hazards: This mixture does not meet the classification criteria according to OSHA HazCom 2012.
OSHA defined hazards: This mixture does not meet the classification criteria according to OSHA HazCom 2012.

Label elements:

Signal word: Danger

Hazard statement: Flammable liquid and vapor. Causes severe skin burns and eye damage.

Precautionary statement:

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist or vapor. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Rinse mouth. Do NOT induce vomiting. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. In case of fire: Use appropriate media for extinction. Wash contaminated clothing before reuse.

Storage: Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures
4. First-aid measures

**Inhalation**
If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.

**Skin contact**
Wash off immediately with soap and plenty of water. Get medical attention immediately.

**Eye contact**
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

**Ingestion**
If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting without advice from poison control center. Get medical attention.

**Most important symptoms/effects, acute and delayed**
Causes severe skin burns and eye damage.

**Indication of immediate medical attention and special treatment needed**
Treat symptomatically.

5. Fire-fighting measures

**Suitable extinguishing media**

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. Thermal decomposition or combustion may liberate toxic gases or fumes.

**Special protective equipment and precautions for firefighters**
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Fire fighting equipment/instructions**
Cool containers exposed to heat with water spray and remove container, if no risk is involved.

**General fire hazards**
Flammable liquid and vapor.

**Hazardous combustion products**
Ammonia. Carbon oxides. Nitrogen oxides (NOx). Other unidentified organic compounds.

6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**
Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep unnecessary personnel away. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8 of the SDS.

**Methods and materials for containment and cleaning up**
Absorb spill with vermiculite or other inert material, then place in a sealed container for chemical waste.

Large Spills: Flush with plenty of water. Prevent entry into waterways, sewer, basements or confined areas. Dike for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

**Environmental precautions**
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

**Precautions for safe handling**
Keep away from heat/sparks/open flames/hot surfaces. · No smoking. Eliminate all sources of ignition. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Do not breathe mist or vapor. Do not get in eyes, on skin, on clothing. Use only with adequate ventilation. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**
Do not store around flammable or combustible materials. Store in tightly closed original container in a well-ventilated place. Keep cool. Store locked up.
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia (CAS 1336-21-6)</td>
<td>35 mg/m3</td>
</tr>
<tr>
<td></td>
<td>50 ppm</td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>1900 mg/m3</td>
</tr>
<tr>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia (CAS 1336-21-6)</td>
<td>STEL</td>
<td>35 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>25 ppm</td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

**US. NIOSH: Pocket Guide to Chemical Hazards**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia (CAS 1336-21-6)</td>
<td>STEL</td>
<td>27 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>35 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>18 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 ppm</td>
</tr>
<tr>
<td>Ethanol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1900 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Explosion-proof general and local exhaust ventilation.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection**

Chemical resistant gloves recommended.

**Other**

Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health or safety professional or manufacturer for specific information.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Contact health and safety professional or manufacturer for specific information.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

**Appearance**

Towelette.

**Physical state**

Liquid.

**Form**

Towelette.

**Color**

Off-white.

**Odor**

Ammonia-like

**Odor threshold**

Not available.

**pH**

> 12

**Melting point/freezing point**

Not available.

**Initial boiling point and boiling range**

Not available.

**Flash point**

78.1 °F (25.6 °C) Closed Cup

**Evaporation rate**

Not available.

**Flammability (solid, gas)**

Not applicable.
Upper/lower flammability or explosive limits

- Explosive limit - lower (%) Not available.
- Explosive limit - upper (%) Not available.

Vapor pressure 115 mm Hg at 68°F (20°C) for a 10% NH₃OH solution
Vapor density 0.6 for Ammonia
Relative density Not available.

Solubility(ies)
- Solubility (water) Soluble.
- Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.
Decomposition temperature Not available.
Viscosity Not available.

Other information
- Specific gravity 0.78 - 1

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Stable at normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid Keep away from heat, sparks and open flame. High temperatures.
Incompatible materials Strong oxidizing agents. Acids.

11. Toxicological information

Information on likely routes of exposure
- Inhalation Inhalation of high concentrations of vapors, may cause respiratory irritation.
- Skin contact Causes severe skin burns.
- Eye contact Causes serious eye damage.
- Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Most important symptoms/effects, acute and delayed
- Causes severe skin burns and eye damage.

Information on toxicological effects

Acute toxicity Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Components | Species | Test Results
--- | --- | ---
Ammonia (CAS 1336-21-6)

- **Acute**
  - **Dermal**
  - LD₅₀ Rabbit No Data in Literature
  - **Inhalation**
  - LC₅₀ Mouse 2115 ppm, 4 hours (ammonia gas)
  - Rat 3670 ppm, 4 hours (ammonia gas)
  - **Oral**
  - LD₅₀ Rat 350 mg/kg

Ethanol (CAS 64-17-5)

- **Acute**
  - **Dermal**
  - LD₅₀ Rabbit > 15800 mg/kg
**Components**  | **Species**  | **Test Results**  
---|---|---
*Inhalation*  
LC50  | Rat  | > 32380 ppm, 4 hours (vapor)  
Oral  
LD50  | Rat  | 7060 mg/kg  
**Skin corrosion/irritation**  
Causes severe skin burns.  
**Serious eye damage/eye irritation**  
Causes serious eye damage.  
**Respiratory or skin sensitization**  
**Respiratory sensitization**  
This product is not expected to cause respiratory sensitization.  
**Skin sensitization**  
This product is not expected to cause skin sensitization.  
**Germ cell mutagenicity**  
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.  
**Carcinogenicity**  
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.  
Not listed.  
**Reproductive toxicity**  
This product is not expected to cause reproductive effects.  
**Specific target organ toxicity - single exposure**  
Not classified as a specific target organ toxicity - single exposure.  
**Specific target organ toxicity - repeated exposure**  
Not classified as a specific target organ toxicity - repeated exposure.  
**Aspiration toxicity**  
Not expected to be an aspiration hazard.  
**12. Ecological information**  
The product is not classified as environmentally hazardous.  
**Ecotoxicity**  
**Components**  | **Species**  | **Test Results**  
---|---|---
Ammonia (CAS 1336-21-6)  
*Aquatic*  
*Acute*  
Crustacea  | EC50  | Water flea (Daphnia magna) 0.66 mg/l, 48 hours  
Fish  | LC50  | Fathead minnow (Pimephales promelas) 8.2 mg/l, 96 hours  
Ethanol (CAS 64-17-5)  
*Aquatic*  
*Acute*  
Algae  | EC50  | Green algae (Selenastrum capricornutum) 1000 mg/l, 96 hours  
Crustacea  | EC50  | Water flea (Daphnia magna) 5012 mg/l, 48 hours  
Fish  | LC50  | Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours  
**Persistence and degradability**  
Not available.  
**Bioaccumulative potential**  
Not available.  
**Partition coefficient n-octanol / water (log Kow)**  
Ethanol  | -0.31  
**Mobility in soil**  
Not available.  
**Other adverse effects**  
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.  
**13. Disposal considerations**  
**Disposal instructions**  
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.  
**Local disposal regulations**  
Dispose in accordance with all applicable regulations.  
**Hazardous waste code**  
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.  
D001: Waste Flammable material with a flash point <140 °F
Disposal of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN1170
UN proper shipping name Ethanol solution (Ethanol RQ = 148 LBS)
Transport hazard class(es)
  Class 3
  Subsidiary risk -
  Label(s) 3
Packing group III
Environmental hazards
  Marine pollutant Yes
  Special precautions for user Not available.
Special provisions 24, B1, IB3, T2, TP1
Packaging exceptions 4b, 150
Packaging non bulk 203
Packaging bulk 242

IATA

UN number UN1170
UN proper shipping name Ethanol Solution (Ethanol)
Transport hazard class(es)
  Class 3
  Subsidiary risk -
  Packing group III
  Environmental hazards No.
ERG Code 3L
Special precautions for user Not available.
Other information
  Passenger and cargo aircraft Allowed.
  Cargo aircraft only Allowed.

IMDG

UN number UN1170
UN proper shipping name ETHANOL SOLUTION (Ethanol)
Transport hazard class(es)
  Class 3
  Subsidiary risk -
  Packing group III
Environmental hazards
  Marine pollutant Yes
EmS F-E, S-D
Special precautions for user Not available.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not available.
### 15. Regulatory information

#### US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

- **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**
  - Not regulated.
- **CERCLA Hazardous Substance List (40 CFR 302.4)**
  - Ammonia (CAS 1336-21-6) Listed.
  - Ethanol (CAS 64-17-5) Listed.
- **SARA 304 Emergency release notification**
  - Not regulated.
  - Not listed.
- **Superfund Amendments and Reauthorization Act of 1986 (SARA)**
  - **Hazard categories**
    - Immediate Hazard - Yes
    - Delayed Hazard - No
    - Fire Hazard - Yes
    - Pressure Hazard - No
    - Reactivity Hazard - No
  - **SARA 302 Extremely hazardous substance**
    - Not listed.
  - **SARA 311/312 Hazardous chemical**
    - Yes
  - **SARA 313 (TRI reporting)**
    - **Chemical name** | **CAS number** | **% by wt.**
    - Ammonia | 1336-21-6 | < 15

Material name: Safetec® Ammonia Inhalants

2136   Version #: 02   Revision date: 02-23-2015   Issue date: 01-19-2015
Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Massachusetts RTK - Substance List
Ammonia (CAS 1336-21-6)
Ethanol (CAS 64-17-5)

US. New Jersey Worker and Community Right-to-Know Act
Ammonia (CAS 1336-21-6)
Ethanol (CAS 64-17-5)

US. Pennsylvania Worker and Community Right-to-Know Law
Ammonia (CAS 1336-21-6)
Ethanol (CAS 64-17-5)

US. Rhode Island RTK
Ammonia (CAS 1336-21-6)

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
Ethanol (CAS 64-17-5) Listed: April 29, 2011

US - California Proposition 65 - CRT: Listed date/Developmental toxin
Ethanol (CAS 64-17-5) Listed: October 1, 1987

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>(PICCS)</td>
<td></td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 01-19-2015
Revision date 02-23-2015
Version # 02

Material name: Safetec® Ammonia Inhalants  SDS US
2136  Version #: 02  Revision date: 02-23-2015  Issue date: 01-19-2015
Disclaimer
Prepared by: ICC The Compliance Center Inc. 1-888-442-9628
http://www.thecompliancecenter.com

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Bibliography
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices (2014)
Canadian Centre for Occupational Health and Safety, CCInfoWeb Databases, 2014
(Chempendium, RTECs, HSDB, INCHEM)
Material Safety Data Sheet from manufacturer.