SECTION 1: Identification

Product identifier: Dust and Lint Remover.
Synonyms: None available.
Product Code Number: 40-600.
SDS number: ID009
Recommended use: Cleaner.
Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
Company Name: IDEAL INDUSTRIES, INC.
Company Address: Becker Place, Sycamore, IL 60178
Company Telephone: Office hours (Mon – Fri)
7AM - 5 PM (CDT)
(815)895-5181
Company Contact Name: Darryl Docter.
Company Contact Email: IDEAL@IDEALINDUSTRIES.COM
Emergency phone number: 24 HOUR EMERGENCY NUMBER:
(815)895-5181.

SECTION 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards
Gases under pressure, Compressed gas.

Health hazards
Not classified as a health hazard under GHS criteria

Environmental hazards
Not classified as an environmental hazard under GHS criteria.

GHS Signal word: WARNING.
GHS Hazard statement(s): Contains gas under pressure; may explode if heated.
GHS Hazard symbol(s):

GHS Precautionary statement(s):
Prevention: No prevention precautionary statements required.
Response: No response precautionary statements required.
Storage: P410 + P403 - Protect from sunlight. Store in a well-ventilated place.
Disposal: No disposal precautionary statements required.

Hazard(s) not otherwise Classified (HNOCS): None known.

Percentage of ingredient(s) of unknown acute toxicity:
Not applicable.

SECTION 3: Composition/information on ingredients

Mixture: 1,1,1,2-Tetrafluoroethane and non-hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS#</th>
<th>Concentration (weight %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2-Tetrafluoroethane</td>
<td>811-97-2</td>
<td>&gt; 99%</td>
</tr>
</tbody>
</table>

SECTION 4: First-aid Measures

Description of necessary measures:
Inhalation: Move to fresh air. Use oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if symptoms persist.

Skin contact: Remove and isolate contaminated clothing and shoes. Wash off with warm water and soap. For minor skin contact, avoid spreading material on unaffected skin. Get medical attention if irritation develops or persists.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms
occur.

**Ingestion:** If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not induce vomiting without advice from poison control center. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If ingestion of a large amount does occur, call a poison control center immediately.

**Most important symptoms/effects, acute and delayed:** Prolonged exposure may cause chronic effects. Health injuries are not known or expected under normal use.

**Indication of immediate medical attention and special treatment needed:** If any symptoms are observed, contact a physician and give them this SDS sheet. If exposed or concerned: Get medical advice/attention. In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

### SECTION 5: Fire-fighting measures

**Suitable extinguishing media:** Not flammable by OSHA criteria. Not combustible by OSHA criteria. Use water, fog or regular foam for large fires.

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** None expected. Combustion products - Oxides of carbon may evolve.

**Special protective equipment and precautions for fire-fighters:** Containers should be cooled with water to prevent vapor pressure build up. Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do so without risk. For fire involving this material, do not enter any enclosed or confined fire space without proper protective equipment. Use self-contained breathing apparatus with full face shield to protect against the hazardous effects of combustion products and oxygen deficiencies.

### SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

**Methods and material for containment and cleaning up:** Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Stop the flow of material, if this is without risk. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. After removal flush contaminated area thoroughly with water.
SECTION 7: Handling and Storage

Precautions for safe handling: Pressurized container: Do not pierce or burn, even after use. Do not smoke while using or until sprayed surface is thoroughly dry. Do not use if spray button is missing or defective. Do not re-use empty containers. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin. Avoid contact with eyes. Wear personal protective equipment. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Conditions for safe storage, including any incompatibles: Contents under pressure. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Do not expose to heat or store at temperatures above 120°F/49°C as container may burst. Keep away from heat, sparks and open flame. Avoid exposure to long periods of sunlight. Keep out of the reach of children.
Level 1 Aerosol (NFPA 30B).

SECTION 8: Exposure controls/personal protection

Control Parameters:

Occupational exposure limits:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PEL-TWA (8 hour)</td>
<td>PEL-STEL (15 min)</td>
<td>TLV-TWA (8 hour)</td>
</tr>
<tr>
<td>1,1,1,2-Tetrafluoroethane</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Appropriate engineering controls: General (mechanical) room ventilation is expected to be adequate. Special local ventilation is recommended to keep dust below exposure limits. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual protection measures, such as personal protective equipment:

Eye/face protection: The use of OSHA compliant chemical goggles are recommended.
**Skin and Hand protection:** None normally required. If worn, gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory protection:** No personal respiratory protective equipment normally required. If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**Other:** None required.

**Thermal hazards:** No data available.

### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Physical state:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form:</td>
<td>Compressed liquefied gas containing yellow foam.</td>
</tr>
<tr>
<td>Color:</td>
<td>Yellow</td>
</tr>
<tr>
<td>Odor:</td>
<td>None</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>No data available</td>
</tr>
<tr>
<td>pH:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point/freezing point:</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>-13 °F (-25 °C) estimated</td>
</tr>
<tr>
<td>Flash point:</td>
<td>None</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>The product is not flammable.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Flammability limit – lower (%):</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability limit – upper (%):</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive limit – lower (%):</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive limit – upper (%):</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure:</td>
<td>100 - 110 psig @70F</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>1.2036</td>
</tr>
<tr>
<td>Solubility(ies):</td>
<td>None</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>No data available</td>
</tr>
<tr>
<td>Other information:</td>
<td></td>
</tr>
<tr>
<td>Density:</td>
<td>1.2035 g/cm³</td>
</tr>
<tr>
<td>Flammability (HOC):</td>
<td>0.247 kJ/g estimated (HOC)</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and Reactivity

Reactivity: Not chemically reactive.
Chemical stability: Stable under normal ambient and anticipated conditions of use.
Possibility of hazardous reactions: Hazardous reactions not anticipated.
Conditions to avoid: Heat, flames and sparks.
Incompatible materials: Avoid strong oxidizers.
Hazardous decomposition Products: None known.

SECTION 11: Toxicological information

Information on likely routes of exposure:
- Inhalation: Inhalation is a primary route of entry.
- Ingestion: Not an expected route of entry.
- Skin: Skin contact is a primary route of entry.
- Eyes: Not an expected route of entry.

Symptoms related to the physical, chemical, and toxicological characteristics:
Intentional misuse by concentrating and inhaling the product can be harmful or fatal. Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. Contact with liquefied gas may cause frostbite. Health injuries are not known or expected under normal use. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury.

Delayed and immediate effects and chronic effects from short or long-term exposure:
Prolonged exposure may cause chronic effects. Health injuries are not known or expected under normal use.

Numerical measures of toxicity:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test Type (species)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2-Tetrafluoroethane</td>
<td>LD₅₀ Oral (Rat)</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>LD₅₀ Dermal (Rabbit)</td>
<td>No data available</td>
</tr>
<tr>
<td></td>
<td>LC₅₀ Inhalation (Rat)</td>
<td>1500 mg/m³ (4h)</td>
</tr>
</tbody>
</table>

Product Acute Toxicity Estimates:
- Acute Oral Toxicity – no data available
- Acute Dermal Toxicity - no data available
- Acute Inhalation Toxicity - no data available

Skin corrosion/irritation: No information available on the mixture, however the main component has been classified as causing mild skin irritation based upon testing.
Serious eye damage/eye irritation: No information available on the mixture, however the main component has been classified as causing mild eye irritation based upon testing.

Respiratory sensitization: No information available on the mixture, however none of the components have been classified as a respiratory sensitizer (or are below the concentration threshold for classification).

Skin sensitization: No information available on the mixture, however none of the components have been classified as a skin sensitizer (or are below the concentration threshold for classification).

Germ cell mutagenicity: No information available on the mixture, however none of the components have been classified for germ cell mutagenicity (or are below the concentration threshold for classification).

Carcinogenicity: No information available on the mixture, however none of the components are listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

Reproductive toxicity: No information available on the mixture, however none of the components have been classified for reproductive toxicity (or are below the concentration threshold for classification).

Specific target organ toxicity-
Single exposure: No information available on the mixture, however none of the components have been classified for STOT SE (or are below the concentration threshold for classification).

Specific target organ toxicity-
Repeat exposure: No information available on the mixture, however none of the components have been classified for STOT RE (or are below the concentration threshold for classification).

Aspiration hazard: No information available on the mixture, however none of the components have been classified for aspiration hazard (or are below the concentration threshold for classification).
Further information: No data available.

SECTION 12: Ecological information

Ecotoxicity:
Product data: No data available

Ingredient Information:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Test Type</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2-Tetrafluoroethane</td>
<td>LC₅₀</td>
<td>Fish Oncorhynchus mykiss (rainbow trout)</td>
<td>450 mg/l (96h)</td>
</tr>
<tr>
<td></td>
<td>EC₅₀</td>
<td>Aquatic invertebrate - Daphnia magna (Water flea)</td>
<td>980 mg/l (48h)</td>
</tr>
<tr>
<td></td>
<td>EC₅₀</td>
<td>Bacteria - Pseudomonas putida</td>
<td>&gt; 730 mg/l (6 h)</td>
</tr>
</tbody>
</table>

Persistence and Degradability: Not readily biodegradable.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal instructions:
Contents under pressure. Do not puncture, incinerate or crush. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

See Sections 7 and 8 for information on handling, storage and personal protection and Section 9 for physical/chemical properties.
Use which results in chemical or physical change of this material could subject it to regulation as a hazardous waste.

SECTION 14: Transport Information

Land transport DOT
UN number N/a
UN proper shipping name Consumer commodity
Transport hazard class(es) ORM-D
Packing group, if necessary N/a
Special provisions 10232
Packaging exceptions 156, 306
Packaging non bulk 156, 306
Packaging bulk None

Maritime transport IMDG
UN number UN 1950
Proper shipping name AEROSOLS
Transport hazard class(es) 2.2
Packing group, if necessary N/a
Packaging exceptions LTD QTY
Labels required None

Air transport ICAO-TI and IATA-DGR
UN number UN 1950
UN proper shipping name Aerosols, non-flammable
Transport hazard class(es) 2.2
Packing group, if necessary N/a
Packaging exceptions LTD QTY
Labels required 2.2

Environmental hazards
Marine pollutant: No.

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)
No further relevant information available.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.
None.

SECTION 15: Regulatory Information

Safety, health and environmental regulations specific for the product.

USA:
United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All substances in this product are listed, or are exempt as required, on the TSCA inventory.

SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311,312 and 313:
Section 302 – No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

CERCLA Hazardous Substance List, 40 CFR 302.4:
None listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): None listed.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): None listed.

SARA Title III
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed.

Section 311/312 (40 CFR 370):
Acute Health Hazard: No
Chronic Health Hazard: No
Fire Hazard: No
Pressure Hazard: Yes
Reactivity Hazard: No

Section 313 Toxic Release Inventory (40 CFR 372):
This product contains the following materials that are subject to the reporting requirements of Section 313 of EPCRA: None

STATE REGULATIONS:
This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986): No components are listed on Prop 65 as a carcinogen.

Massachusetts Right to Know: No components are listed on the Massachusetts Right to Know List.

New Jersey Right to Know: 1,1,1,2-Tetrafluoroethane is listed on the New Jersey Right to Know list.

Pennsylvania Right to Know: 1,1,1,2-Tetrafluoroethane is listed on the Pennsylvania Right to Know List.

Canada WHMIS Hazard Class: A – Compressed Gas

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

Revision Date: May 5, 2015

To the best of our knowledge, the information contained herein is accurate. However IDEAL INDUSTRIES INC. does not assume any liability whatsoever for the accuracy or
completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.