SECTION 1: Identification of the Substance/Mixture and Company Identification

1.1. Product Identifier

Manufacturer: Peca Products Air Duster
Trade name: DUST-PRO Air Duster 12 oz, 6 oz, 2.5 oz
CAS No.: 011-57-2
Formula: C2H8N4

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: Air duster

1.3. Details of the supplier of the safety data sheet

Peca Products Inc.
Beloit, WI 53511
USA

1.4. Emergency telephone number

Emergency number: 1-800-24-9360

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Compressed gas H280

2.2. Label elements

GHS-US labeling
Hazard pictograms (GHS-US)

Signal word (GHS-US)
Warning
H280 - Compressed gas under pressure, may explode if heated
P101 / P403 - Protect from sunlight. Store in a well-ventilated place
P261 - Avoid breathing dust and fumes
P412 - Do not expose to temperatures exceeding 50°C/122°F

2.3. Other hazards

Other hazards not contributing to the classification: Contains gas under pressure, may explode if heated. Intentional misuse and inhalation above may cause cardiac and central nervous system effects. Warning: May cause irritation in contact with skin.

2.4. Unknown acute toxicity (GHS-US)

No data available

04/10/2015
SECTION 3: Composition/Information on Ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Substance</th>
<th>Product Identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1,1,2-Tetrafluoroethane</td>
<td>(CAS No) 611-97-2</td>
<td>&gt;99</td>
<td>Compressed gas, INN</td>
</tr>
</tbody>
</table>

Full text of H-phrases see section 10

3.2. Mixtures

Not applicable

SECTION 4: First Aid Measures

4.1. Description of first aid measures

First aid measures generally:
- Check the vital functions. Unconsciousness: maintain adequate oxygen and respiration. Respiratory arrest: administer oxygen by endotracheal intubation or mask. Cardiac arrest: perform cardiopulmonary resuscitation. Monitor continuous with heart rate, rhythm and blood pressure. Monitor temperature, urine output, and possible adverse effects.
- Thermometers, defibrillators, and intravenous equipment are also available. Maintain the patient in the recovery room, avoid physical strain.

First aid measures after inhalation:
- Remove the patient from the contaminated area. Call a doctor or a poison control center.

First aid measures after skin contact:
- Wash off immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take off contaminated clothing. Cool the burned area with cool running water. Cover with sterile bandage. Consult a doctor.

First aid measures after eye contact:
- Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take patient to an ophthalmologist.

First aid measures after ingestion:
- Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms and Effects:
- Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:
- Water or other water-based extinguishing agents.

Unsuitable extinguishing media:
- No unsuitable extinguishing media known.

5.2. Special hazards arising from the fire-fighter's or preserver's point of view

Fire hazard:
- DIRECT FIRE HAZARD. Non-combustible.

Explosion hazard:

Reactivity:
- Does not react with common reagents. Can be used in the presence of water.

04/10/2015
5.3. Advice for Firefighters

Precautionary measures for fire fighting/exposure:
- Exposure to anesthetic gases; consider emergency evacuation.

Precautionary measures for vapors:
- Cool tanks/drums with water sprayed from main service. Physical explosion risk: cool from behind and vent vessel to remove the load if exposed to heat. After cooling, persistent risk of physical explosion. Dilute discharged vapor with water spray.

Protection during firefighting:
- Use non-fuel-resistant, compressed air/oxygen apparatus.

SECTION 6: Accidental Release Measures

6.1. Personal Protection, Protective Equipment and Emergency Procedures

6.1.1. For exposed emergency personnel

Protective equipment:
- Insulating gloves, Protective clothing, Large spillage enclosed space: compressed air apparatus.

Emergency procedures:
- Keep upwind. Mark the danger area. Seal off leaking areas. Close doors and windows of adjacent buildings. No naked flames, carry out emergency operations. Aspirate contaminated air/air lines. Large spillage confined spaces: consider evacuation.

6.1.2. For emergency responders

Protective equipment:
- Equip clean-up crew with proper protection.

Emergency procedures:
- Ventilate area.

6.2. Environmental Protection

Prevent entry to surface and surface waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning up

For containment:
- Contain released substance, pump into suitable containers. Plug breaks, cut off the supply. Tip the container onto its side to stop the leakage. Do not spray water on unheated tank walls.

Methods for cleaning up:
- Damaged/contaminated tanks must be emptied.

6.4. Reference to other sections

Annex 8: Exposure controls and personal protection.

SECTION 7: Handling and Storage

7.1. Precautions for Safe Handling

Additional hazards when processed:
- Pressurized container; do not place on an open flame.

Precautions for safe handling:
- Comply with the local requirements. Handle and open the container with care. Thoroughly clean the container before use. Keep away from naked flames. Observe normal hygiene standards. Carry out operations in the appropriate local exhaust ventilation or with respiratory protection. Measure the oxygen concentration in the air.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage conditions:
- Keep only in the original container in a cool, well-ventilated place away from naked flames. Keep container closed when not in use.

Incompatible products:
- Strong bases, Strong acids.

Stability:
- Stable if properly stored and handled.

Storage temperature:
- 0°C

Storage area:
- KEEP SUBSTANCE AWAY FROM heat sources.

Prohibitions on mixed storage:
- KEEP SUBSTANCE AWAY FROM (strong) acids.

Storing area:
- Store in a cool area, keep out of direct sunlight. Ventilation at Ground Level. Avoid contact with the skin.

Special states on packaging:
- SPECIAL REQUIREMENTS: with pressure relief valve. Clean, empty, labeled, meet the legal requirements.

Packaging container:
- SUITABLE MATERIAL: INHALED: material to avoid. No data available.

7.3. Specific end use(s)

Follow Local Requirements.

SECTION 8: Exposure Controls/Personal Protection
3.2. Exposure controls

**Personal protective equipment**: Gloves, safety glasses. Avoid all unnecessary exposure.

- Materials for protective clothing: GORE® PROBION®; non-permeable, non-toxic, non-flammable.
- Hand protection: Insulated gloves.
- Eye protection: Safety glasses.
- Skin and body protection: Protective clothing.
- Respiratory protection: High vapor pressure: concentration, self-contained respirator.
- Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Gas</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless, clear</td>
</tr>
<tr>
<td>Melting point</td>
<td>-103 °C</td>
</tr>
<tr>
<td>Boiling point</td>
<td>25 °C</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>1.16 kg/m³ at 20 °C</td>
</tr>
<tr>
<td>Critical pressure</td>
<td>20 MPa</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>362 kg/m³ (20 °C)</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.24-27 °C</td>
</tr>
<tr>
<td>Density</td>
<td>1206 kg/m³ (25 °C)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Poorly soluble in water, soluble in ethanol, soluble in ether, soluble in hexane, insoluble in heptane (25 °C)</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and Reactivity

10.1. Reactivity
On burning, release of toxic and corrosive gases/vapours (hydrofluoric acid, carbon monoxide, carbon dioxide, carbon monoxide). Reacts with some acids.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

Acute Toxicity
- Not classified

LD₅₀ (oral, rat)
- > 2000 mg/kg (Rat)

Skin corrosion/irritation
- Not classified

Serious eye damage/irritation
- Not classified

Respiratory tract irritation
- Not classified

Genotoxicity
- Not classified based on available data; the classification criteria are not met.

Carcinogenicity
- Not classified
12.1. Toxicity

- Ecotoxicology - general: No environmental hazard.
- Ecology - air:
- Ecology - water: Mid-level pollutant (surface water). Maximum concentration in drinking water: 1.8 mg/l (Dissolved Oxygen). Restricted to aquatic life (Dissolved Oxygen: EC50 (48h): 100 - 1800 mg/l).

134a (811-87-2)

- LC50 fish: 1 h: 45 mg/l (96-h Salmo gairdneri, Channa mynuclus immobilis)
- EC50 Daphnia 1: 46 mg/l (48 h, Daphnia magna)

12.2. Persistence and degradability

- Persistence and degradability: Not readily biodegradable in water.

12.3. Bioaccumulative potential

- Bioaccumulative potential: Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

- Mobility in soil: No additional information available.

12.5. Other adverse effects

- Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Waste disposal recommendations: Remove waste in accordance with local and national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the immediate management of the waste. Hazardous waste shall be managed resourcefully. All emitters that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution in damage to property or animals. Write to manufacturer or supplier for information on recovery methods.
SECTION 14: Transport Information

In accordance with ADR / RID / IMDG / IATA:

**UN/NA**: UNI5158, 1,1,1,2-Tetrafluoroethane, 2 2, Limited Quantity

**ICAO/IATA (code)**: UNI5158, 1,1,1,2-Tetrafluoroethane, 2 2, Limited Quantity

**IMO/IMDG (water)**: UNI5158, 1,1,1,2-Tetrafluoroethane, 2, Limited Quantity

**Special Provisions**: DOT-SHP 1032; In accordance with this special permit, the product container is marked with DOT-SHP 1032 instead of 212. This packaging is approved for shipping as a Consumer Commodity.

DOT-SHP 1032; In accordance with this special permit, the product container is marked with DOT-SHP 1032 instead of 212. This packaging is approved for shipping as a Consumer Commodity.

**DOT Proper Shipping Name**: 1,1,1,2-Tetrafluoroethane

**UN number**: 1258

**Class**: 2.2 - Non-flammable compressed gas (2.2 - NCG / 2.2 - Non-flammable gas, ORN-O)

**DOT Special Provisions** (49 CFR 172.102): DOT-SHP 1032; In accordance with this special permit, the product container is marked with DOT-SHP 1032 instead of 212. This packaging is approved for shipping as a Consumer Commodity.

**Explanation**: DOT-SHP 1032; In accordance with this special permit, the product container is marked with DOT-SHP 1032 instead of 212. This packaging is approved for shipping as a Consumer Commodity.

**Transporation Canada**

**DOT Packaging (exceptions)** (49 CFR 172.105): 212

**DOT Packaging (Non-Rules)** (49 CFR 172.106): 212

**DOT Packaging (Rule)** (49 CFR 172.106): 212

**14.3 Additional Information**

**Other information**: No supplementary information available.

**State during transport (ADR/KAL)**: As compressed gas, under pressure.

**Overland transport**

**Class (ADR)**: 2.2 - Gases

**Hazard Identification number (Number No.)**: 20

**Classification code (ADR)**: 20A

**Danger labels (ADR)**: 2.2 - Non-flammable compressed gas

**Orange plates**: 2.2 - Non-flammable compressed gas
SECTION 15: Regulatory information

15.1 US Federal regulations

13Ax (§ 180.57-2)

Listed on the United States TSCA (Toxic Substance Control Act) inventory

SARA Section 311/312 Hazard Classes

Sudden release of pressure hazard

15.2 International regulations

CANADA

13Ax (811-97-2)

WHMIS Classification

Class A - Compressed Gas

EU-Regulations

No additional information available

Classification according to Regulation (EC) No 1272/2008 (CLP)

Press. Gas

Full text of H-phrases; see section 15

Classification according to Directive 82/581/EEC or 1999/45/EC not classified

15.2.3 National regulations

No additional information available

15.3 US State regulations

No additional information available
Compartment gas

NFPA Health Hazard
1 - Exposure could cause irritation but only minor residual injury even if no treatment is given.
0 - Materials that will not burn.

NFPA Fire Hazard
1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.
0 - Minimal Hazard
1 - Slight Hazard

NFPA Reactivity
0 - Minimal Reactivity
1 - Slight Reactivity
2 - Moderate Reactivity
3 - Severe Reactivity