1. Product and Company Identification

Product name : **Xenon**

Chemical formula : Xe

Synonyms : Xenon Atom; Xe; UN 2036

Company : Specialty Gases of America, Inc
6055 Brent Dr.
Toledo, OH 43611

Telephone : 419-729-7732
Emergency : 800-FINE-GAS

2. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>% Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xenon</td>
<td>7440-63-3</td>
<td>100%</td>
</tr>
</tbody>
</table>

3. Hazards Identification

Emergency Overview
Containers may rupture or explode if exposed to heat.
May cause difficulty breathing.

Potential Health Effects

<table>
<thead>
<tr>
<th>Health Effect</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Nausea, vomiting, symptoms of drunkenness, suffocation, convulsions, coma.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>No information is available.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No information is available.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No information on significant adverse effects.</td>
</tr>
<tr>
<td>Chronic Health</td>
<td>None known.</td>
</tr>
<tr>
<td>Hazard</td>
<td>None known.</td>
</tr>
</tbody>
</table>

4. First Aid Measures

<table>
<thead>
<tr>
<th>Health Effect</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Wash exposed skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>If a large amount is swallowed, get immediate medical attention.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.</td>
</tr>
</tbody>
</table>

5. Fire-Fighting Measures

<table>
<thead>
<tr>
<th>Fire-Fighting Measure</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable</td>
<td>Carbon dioxide, regular dry chemical.</td>
</tr>
</tbody>
</table>
extinguishing media: Large fires: Use regular foam or flood with fine water spray.
Specific hazards: Negligible fire hazard. Containers may rupture or explode if exposed to heat.
Fire fighting: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Stay away from the ends of tanks. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For tank, rail car or tank truck, evacuation radius: 800 meters (1/2 mile).
Protective Equipment and Precautions for Firefighters: Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

6. Accidental Release Measures

Occupational spill/release: Stop leak if possible without personal risk. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind and keep out of low areas.
Additional advice: None.

7. Handling and Storage

Handling: Avoid breathing gas. Use only with adequate ventilation.
Storage:

8. Exposure Controls / Personal Protection

ACGIH, OSHA and NIOSH have not developed exposure limits for any of this product’s components.

Engineering measures/Ventilation
- Ensure compliance with applicable exposure limits. Provide local exhaust or process enclosure ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present.

Personal protective equipment
- Respiratory protection: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum. Consider warning properties before use. For unknown concentrations or Immediately Dangerous to Life or Health – Any supplied-air respirator with a full facepiece that is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive-pressure mode. Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode.
- Hand protection: Protective gloves are not required, but recommended.
- Eye protection: Wear splash resistant safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
- Skin and body protection: Protective clothing is not required.

9. Physical and Chemical Properties

Form: Gas.
Color : Colorless.
Odor : Odorless.
Molecular weight : 131.30
Vapor density : 4.561 (air = 1)
Vapor pressure : 760 mmHg @ -108°C
Boiling point : -108°C
Melting point : -112°C
Water solubility : 0.108

10. Stability and Reactivity

Stability : Stable under normal conditions.
Conditions to avoid : Protect from physical damage and heat. Containers may rupture or explode if exposed to heat.
Materials to avoid : Halogens.
Hazardous decomposition products : None known.

11. Toxicological Information

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

Component Carcinogenicity
None of this product’s components are listed by ACGIH, IARC, NTP, OSHA or DFG.

12. Ecological Information

No LOI ecotoxicity data are available for this product’s components.

13. Disposal Considerations

Waste from residues / unused products : Dispose in accordance with all applicable regulations.
Contaminated packaging : Return cylinder to supplier.

14. Transport Information

DOT (US only)
Proper shipping name : Xenon
Class : 2.2
UN/ID No. : UN2036
Labeling : Non-Flammable Gas

15. Regulatory Information

U.S. Federal Regulations
None of this product’s components are listed under SARA Section 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.
SARA 311/312
   Acute: Yes
   Chronic: No
   Fire: No
   Reactive: No
   Pressure: Yes

U.S. State Regulations
   None of this product’s components are listed on the state lists from CA, MA, MN, NJ, PA or RI.

   Not regulated under California Proposition 65