

Issue Date: 03-Aug-2022

Revision Date: 25-Jun-2024

Version 2

## 1. IDENTIFICATION

### Product identifier

**Product Name** Xenon

### Other means of identification

**SDS #** EF-025  
**Synonyms** Xe.  
**UN/ID No** UN2036

### Recommended use of the chemical and restrictions on use

**Recommended Use** Industrial and Specialty Gas Applications.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

EFC Gases & Advanced Materials  
3266 Bergey Road  
Hatfield, PA 19440  
Email: efcsafety@efcgases.com

### Emergency telephone number

**Company Phone Number** 215-443-9600  
**Emergency Telephone** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

**Appearance** Colorless gas

**Physical state** Gas

**Odor** Odorless

### Classification

Gases under pressure	Liquefied gas
Gases under pressure	Refrigerated liquefied gas
Simple asphyxiants	Yes

### Signal Word

**Warning**

### Hazard statements

Contains gas under pressure; may explode if heated  
Contains refrigerated gas; may cause cryogenic burns or injury  
May displace oxygen and cause rapid suffocation



### Precautionary Statements - Prevention

Wear cold insulating gloves/face shield/eye protection

**Precautionary Statements - Response**

Get immediate medical advice/attention

Thaw frosted parts with lukewarm water. Do not rub affected area

**Precautionary Statements - Storage**

Protect from sunlight. Store in a well-ventilated place

Store in a well-ventilated place

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Synonyms**

Xe.

**Chemical Family**

Inorganic, gas.

Chemical name	CAS No	Weight-%
Xenon	7440-63-3	100

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST AID MEASURES****Description of first aid measures****Eye Contact**

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

**Skin Contact**

Wash 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.

**Inhalation**

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

**Ingestion**

If swallowed, get medical attention.

**Most important symptoms and effects, both acute and delayed****Symptoms**

Frostbite, suffocation.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable Extinguishing Media**

Carbon Dioxide, regular dry chemical, Large fires: Use regular foam or flood with fine water spray.

**Unsuitable Extinguishing Media** None known.**Specific Hazards Arising from the Chemical**

Negligible fire hazard. Containers may rupture or explode if exposed to heat.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. 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).

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions** 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.

### Environmental precautions

**Environmental precautions** Avoid release to the environment. See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Stop leak if possible without personal risk. Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on Safe Handling** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Protect from sunlight. Store in a well-ventilated place.

**Incompatible Materials** Halogens.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

### Appropriate engineering controls

**Engineering Controls** Showers. Eyewash stations. Ventilation systems.

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

**Eye/Face Protection** Wear splash resistant safety goggles.

**Skin and Body Protection** For the gas: Wear appropriate chemical resistant gloves. For the liquid: Wear appropriate protective, cold insulating clothing.

**Respiratory Protection** Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive pressure mode.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

<b>Physical state</b>	Gas	<b>Odor</b>	Odorless
<b>Appearance</b>	Colorless gas	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No data available	
<b>Melting point / freezing point</b>	-112°C / -170°F	
<b>Initial boiling point and boiling range</b>	-108°C / -162°F	
<b>Flash point</b>	No data available	
<b>Evaporation Rate</b>	Not determined	
<b>Flammability (Solid, Gas)</b>	Non-flammable	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor Pressure</b>	760 mmHg	
<b>Vapor Density</b>	No data available	
<b>Relative Density</b>	Not determined	
<b>Water Solubility</b>	0.108%	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Autoignition temperature</b>	No data available	
<b>Decomposition temperature</b>	Not determined	
<b>Kinematic viscosity</b>	0.528 cP	
<b>Dynamic Viscosity</b>	Not determined	
<b>Explosive Properties</b>	Not determined	
<b>Oxidizing Properties</b>	Not determined	

## 10. STABILITY AND REACTIVITY

### Reactivity

Not reactive under normal conditions.

### Chemical stability

Stable under recommended storage conditions.

### Possibility of hazardous reactions

None under normal processing.

<b>Hazardous Polymerization</b>	Will not polymerize.
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### Conditions to Avoid

Protect from physical damage and heat.

### Incompatible materials

Halogens.

### Hazardous decomposition products

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### **Product Information**

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Do not inhale.
<b>Ingestion</b>	Do not ingest.

### Component Information

Not determined

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Please see section 4 of this SDS for symptoms.
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### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Carcinogenicity</b>	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
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### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document Not determined.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

### Component Information

Not available

### Persistence/Degradability

Not determined.

### Bioaccumulation

There is no data for this product.

### Mobility

Not determined

### Other adverse effects

Not determined

## 13. DISPOSAL CONSIDERATIONS

### Waste Treatment Methods

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**  
**UN/ID No** UN2036  
**Proper Shipping Name** Xenon, compressed  
**Transport hazard class(es)** 2.2

**IATA**  
**UN number or ID number** UN2036  
**Proper Shipping Name** Xenon, compressed  
**Transport hazard class(es)** 2.2

**IMDG**  
**UN number or ID number** UN2036  
**Proper Shipping Name** Xenon, compressed  
**Transport hazard class(es)** 2.2

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Xenon	X	ACTIVE	X	X	X	X	X	X	X

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELI NCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*
- AICS - Australian Inventory of Chemical Substances*

**US Federal Regulations**

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 311/312 Hazard Categories**

**Acute health hazard** Yes  
**Chronic Health Hazard** No  
**Fire hazard** No  
**Sudden Release of Pressure Hazard** Yes  
**Reactive Hazard** No

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health hazards</b> 1	<b>Flammability</b> 2	<b>Instability</b> 0	<b>Special hazards</b> -
<b><u>HMIS</u></b>	<b>Health hazards</b> -	<b>Flammability</b> -	<b>Physical hazards</b> -	<b>Personal Protection</b> Not determined

**Issue Date:** 03-Aug-2022  
**Revision Date:** 25-Jun-2024  
**Revision Note:** Regulatory review

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**