# **Material Safety Data Sheet**

Version 3.5 Revision Date 07/13/2012 Print Date 08/16/2012

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Krypton

Product Number : 00484 Brand : Fluka

Supplier : Sigma-Aldrich

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USA

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both supplier and

both supplier and manufacturer)

Preparation Information : Sigma-Aldrich Corporation

Product Safety - Americas Region

1-800-521-8956

## 2. HAZARDS IDENTIFICATION

## **Emergency Overview**

## **OSHA Hazards**

Compressed Gas

#### **GHS Classification**

Gases under pressure (Compressed gas)

## GHS Label elements, including precautionary statements

Pictogram

 $\Diamond$ 

Signal word Warning

Hazard statement(s)

H280 Contains gas under pressure; may explode if heated.

Precautionary statement(s)

P410 + P403 Protect from sunlight. Store in a well-ventilated place.

**HMIS Classification** 

Health hazard: 0 Flammability: 0 Physical hazards: 0

**NFPA Rating** 

Health hazard: 0 Fire: 0 Reactivity Hazard: 0

## **Potential Health Effects**

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.Skin May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation. **Ingestion** May be harmful if swallowed.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : Kr

Molecular Weight : 83.8 g/mol

Component		Concentration
Krypton		
CAS-No.	7439-90-9	-
EC-No.	231-098-5	

## 4. FIRST AID MEASURES

## **General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIREFIGHTING MEASURES

## Conditions of flammability

Not flammable or combustible.

## Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

## **Hazardous combustion products**

## **Further information**

Use water spray to cool unopened containers. The product itself does not burn.

## 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions

Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

## **Environmental precautions**

Do not let product enter drains.

## Methods and materials for containment and cleaning up

Clean up promptly by sweeping or vacuum.

## 7. HANDLING AND STORAGE

#### Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place.

Avoid heating above: 40°C Contents under pressure.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

## Personal protective equipment

## **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## **Hand protection**

Handle with gloves. 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.

#### Eye protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

## Skin and body protection

impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

## **Appearance**

Form Compressed gas
Colour no data available

## Safety data

pH no data available

Melting point/range: -157.2 °C (-251.0 °F)

point/freezing point

Boiling point -153.4 °C (-244.1 °F) at 1,013 hPa (760 mmHg)

Flash point not applicable
Ignition temperature no data available
Autoignition no data available

temperature

Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available
Density no data available
Water solubility no data available
Partition coefficient: no data available

n-octanol/water

Relative vapour no data available

density

Odour no data available
Odour Threshold no data available

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## 10. STABILITY AND REACTIVITY

## **Chemical stability**

Stable under recommended storage conditions.

## Possibility of hazardous reactions

no data available

## Conditions to avoid

no data available

#### Materials to avoid

no data available

## Hazardous decomposition products

Other decomposition products - no data available

## 11. TOXICOLOGICAL INFORMATION

## **Acute toxicity**

## Oral LD50

no data available

#### Inhalation LC50

no data available

#### **Dermal LD50**

no data available

## Other information on acute toxicity

no data available

#### Skin corrosion/irritation

no data available

## Serious eye damage/eye irritation

no data available

## Respiratory or skin sensitization

no data available

## Germ cell mutagenicity

no data available

## Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a

known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

## Reproductive toxicity

no data available

## **Teratogenicity**

no data available

## Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

## Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

## **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

## Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Synergistic effects

no data available

## **Additional Information**

RTECS: Not available

## 12. ECOLOGICAL INFORMATION

## **Toxicity**

no data available

## Persistence and degradability

no data available

## Bioaccumulative potential

no data available

#### Mobility in soil

no data available

#### PBT and vPvB assessment

no data available

## Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

## DOT (US)

UN number: 1056 Class: 2.2

Proper shipping name: Krypton, compressed

Reportable Quantity (RQ): Marine pollutant: No

Poison Inhalation Hazard: No

#### **IMDG**

UN number: 1056 Class: 2.2 EMS-No: F-C, S-V

Proper shipping name: KRYPTON, COMPRESSED

Marine pollutant: No

**IATA** 

UN number: 1056 Class: 2.2

Proper shipping name: Krypton, compressed

## 15. REGULATORY INFORMATION

#### **OSHA Hazards**

Compressed Gas

## **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

## **SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### SARA 311/312 Hazards

Sudden Release of Pressure Hazard

## **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

## Pennsylvania Right To Know Components

Krypton CAS-No. Revision Date 7439-90-9 1989-12-01

## **New Jersey Right To Know Components**

CAS-No. Revision Date Krypton 7439-90-9 1989-12-01

## California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## **16. OTHER INFORMATION**

## **Further information**

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