Safety data sheet Krypton, compressed.

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1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product name

Krypton, compressed.

EC No (from EINECS): 231-098-5

CAS No: 7439-90-9

Index-Nr. -

Chemical formula Kr

REACH Registration number:

Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH),

exempted from registration. **Known uses**

Not known.

Company identification

Chengdu Taiyu Industrial Gases Co.,Ltd

No.2375, Chengluo Avenue, Longquan District, Chengdu City,

China

TELEPHONE NUMBER: (86)28 88455212

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification acc. to Regulation (EC) No 1272/2008/EC (CLP/GHS)

Press. Gas (Compressed gas) - Contains gas under pressure; may explode if heated.

Classification acc. to Directive 67/548/EEC & 1999/45/EC

Not classified as hazardous to health.

Asphyxiant in high concentrations.

Risk advice to man and the environment

In high concentrations may cause asphyxiation.

Compressed gas.

Label Elements

- Labelling Pictograms



- Signal word

Warning

- Hazard Statements

H280 Contains gas under pressure; may

explode if heated.

EIGA-As Asphyxiant in high concentrations.

- Precautionary Statements

Precautionary Statement Prevention

None.

Precautionary Statement Reaction

lone

Precautionary Statement Storage

P403 Store in a well-ventilated place.

Precautionary Statement Disposal

None.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation: Substance.

Components/Impurities Krypton, compressed. CAS No: 7439-90-9

Index-Nr.: -

EC No (from EINECS): 231-098-5 REACH Registration number:

Listed in Annex IV/V of Regulation (EC) No 1907/2006 (REACH),

exempted from registration.

Contains no other components or impurities which will influence the

classification of the product.

4 FIRST AID MEASURES

Inhalation

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Ingestion

Ingestion is not considered a potential route of exposure.

5 FIRE FIGHTING MEASURES

Specific hazards

Exposure to fire may cause containers to rupture/explode. Non flammable

Hazardous combustion products

None.

Suitable extinguishing media

All known extinguishants can be used.

Specific methods

If possible, stop flow of product. Move container away or cool with water from a protected position.

Special protective equipment for fire fighters

In confined space use self-contained breathing apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions

Evacuate area. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. Ensure adequate air ventilation. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

Environmental precautions

Try to stop release. Clean up methods Ventilate area.

7 HANDLING AND STORAGE

Handling

Suck back of water into the container must be prevented. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt. Refer to supplier's handling instructions. Only experienced and properly instructed personsshould handle gases under pressure. Protect cylinders from physical damage; do not drag, roll, slide or drop. Never use direct flame or electrical heating devices to raise the pressure of a container. Do not remove or deface labels provided by the supplier for the identification of the cylinder contents. When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.) designed to transport cylinders. Leave

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valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. Ensure the complete gas system has been (or is regularily) checked for leaks before use. If user experiences any difficulty operating cylinder valve discontinue use and contact supplier. Close container valve after each use and when empty, even if still connected to equipment. Never attempt to repair or modify container valves or safety relief devices. Damaged valves should be reported immediately tothe supplier. Replace valve outlet caps or plugs and containercaps where supplied as soon as container is disconnected from equipment. Keep container valve outlets clean and free fromcontaminates particularly oil and water. Never attempt to transfer gases from one cylinder/container to another. Do not smoke while handling product. The substance must be handled in accordance withgood industrial hygiene and safety procedures.

Storage

Keep container below 50°C in a well ventilated place. Observe all regulations and local requirements regarding storage of containers. Containers should not be stored in conditions likely to encourage corrosion. Containers should be stored in the vertical position and properly secured to prevent falling over. Stored containers should be periodically checkedfor general conditions and leakage. Container valve guards or caps should be in place. Store containers in location free from fire riskand away from sources of heat and ignition. Keep away from combustible materials Observe "Technische Regeln Druckgase (TRG) 280 Ziffer 5"

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection

Ensure adequate ventilation.

9 PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance/Colour: Colourless gas.

Odour: None.

Important information on environment, health and safety

Molecular weight: 84 g/mol Melting point: -157,2 °C Boiling point: -153 °C Critical temperature: -63,8 °C

Autoignition temperature: Not applicable. **Flammability range:** Not applicable.

Relative density, gas: 2,9

Relative density, liquid: Not applicable. Solubility mg/l water: 221 mg/l

Maximum filling pressure (bar): 200 bar

Other data

Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

10 STABILITY AND REACTIVITY

Stability and reactivity

Stable under normal conditions.

Hazardous decomposition products Statements on decomposition None.

11 TOXICOLOGICAL INFORMATION

General

No known toxicological effects from this product.

12 ECOLOGICAL INFORMATION

General

No known ecological damage caused by this product.

13 DISPOSAL CONSIDERATIONS

Ganara

Do not discharge into any place where its accumulation could be dangerous. May be vented to atmosphere in a well ventilated place. Contact supplier if guidance is required.

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14 TRANSPORT INFORMATION

ADR/RID

Class 2 Classification Code 1A

UN number and proper shipping name

UN 1056 Krypton, compressed UN 1056 Krypton, compressed

Labels 2.2 Hazard number 20

Packing Instruction P200

IMDG

Class 2.2

UN number and proper shipping name

UN 1056 Krypton, compressed
Labels 2.2
Packing Instruction P200
EmS FC, SV

IATA

Class 2.2

UN number and proper shipping name

UN 1056 Krypton, compressed Labels 2.2 Packing Instruction P200 Other transport information

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers ensure that they are firmly secured. Ensure that the cylinder valve is closed and not leaking. Ensure that the valve outlet cap nut or plug (where provided) is correctly fitted. Ensure that the valve protection device (where provided) is correctly fitted. Ensure

adequate ventilation. Ensure compliance with applicable regulations.

15 REGULATORY INFORMATION

Further national regulations

Pressure Vessel Regulation

Regulations for the prevention of industrial accidents

Water pollution class

Not polluting to waters according to VwVwS from 17.05.99.

TA-Luft

Not classified according to TA-Luft.

16 OTHER INFORMATION

Ensure all national/local regulations are observed. The hazard of asphyxiation is often overlooked and must be stressed during operator training. Before using this product in any new process or

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experiment, a thorough material compatibility and safety study should be carried out.

Advice

Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted. Details given in this document are believed to be correct at the time of going to press.

Further information

Linde safety advice

No. 3 Oxygen deficiency

No. 7 Safe handling of gas cylinders and cylinder bundles

No. 11 Transport of gas receptacles in vehicles

End of document