

SAFETY DATA SHEET

Nitrogen, Refrigerated Liquid

Product: Liquid Nitrogen MSDS NR: KS-LN2/012 VERSION 1.01 DATED 31/05/2015 PAGE 1/2

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY

Product name

Nitrogen, refrigerated, liquid.
EC No (from EINECS): 231-783-
9 CAS No: 7727-37-9

Index-Nr. -

Chemical formula N2 REACH

Registration number:

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

Known uses

Not known.

Company identification

Karim & Sons

69-A, Timber Pond, M.A.Jinnah
Road, Keamari,
Karachi-75700

Phone: +92 213 2851790

+92 213 2850005

E-Mail info@karimsons.net

2 HAZARDS IDENTIFICATION Classification

of the substance or mixture

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

Press. Gas - Contains refrigerated gas; may cause cryogenic
burns or injury.

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

Refrigerated liquefied gas. Contact with product may cause cold
burns or frostbite.

In high concentrations may cause asphyxiation.

Label Elements

- Labelling Pictograms



- Signal word

Warning

- Hazard Statements

H281 Contains refrigerated gas; may cause
cryogenic burns or injury.
EIGA-As Asphyxiant in high concentrations.

- Precautionary Statements

Precautionary Statement Prevention

P282 Wear cold insulating gloves/face
shield/eye protection.

Precautionary Statement Reaction

P336+P315 Thaw frosted parts with lukewarm water.
Do not rub affected area. Get immediate
medical advice/attention.

Precautionary Statement Storage

P403 Store in a well-ventilated place.

Precautionary Statement Disposal

3 COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Preparation: Substance.

Components/Impurities

Nitrogen, refrigerated, liquid.

CAS No: 7727-37-9

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EC No (from EINECS): 231-783-

9 REACH Registration number:

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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.

Skin/eye contact

Immediately flush eyes thoroughly with water for at least 15
minutes. In case of frostbite spray with water for at least 15 minutes.
Apply a sterile dressing. Obtain medical assistance.

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. Use protective clothing. Wear self-contained
breathing apparatus when entering area unless atmosphere is
proved to be safe.

Environmental precautions

Prevent from entering sewers, basements and workpits, or any
place where its accumulation can be dangerous. 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.

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Storage

Keep container below 50°C in a well ventilated place. Observe "Technische Regeln Druckgase (TRG) 280 Ziffer 5"

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection

Protect eyes, face and skin from liquid splashes. Ensure adequate ventilation.

9 PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance/Colour: Colourless liquid.

Odour: None.

Important information on environment, health and safety

Molecular weight: 28 g/mol

Melting point: -210 °C

Boiling point: -196 °C

Critical temperature: -147 °C

Autoignition temperature: Not applicable.

Flammability range: Not applicable.

Relative density, gas: 0,97

Relative density, liquid: 0,8

Solubility mg/l water: 20 mg/l

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. Liquid spillages can cause embrittlement of structural materials.

11 TOXICOLOGICAL INFORMATION

General

No known toxicological effects from this product.

12 ECOLOGICAL INFORMATION

General

Can cause frost damage to vegetation.

13 DISPOSAL CONSIDERATIONS

General

Do not discharge into any place where its accumulation could be dangerous. Contact supplier if guidance is required.

EWC Nr. 16 05 05

14 TRANSPORT INFORMATION

ADR/RID

Class 2 Classification Code 3A

UN number and proper shipping name

UN 1977 Nitrogen, refrigerated, liquid

UN 1977 Nitrogen, refrigerated, liquid

Labels 2.2 Hazard number 22

Packing Instruction P203

IMDG

Class 2.2

UN number and proper shipping name

UN 1977 Nitrogen, refrigerated, liquid

Labels 2.2

Packing Instruction P203

EmS FC,SV

IATA

Class 2.2

UN number and proper shipping name

UN 1977 Nitrogen, refrigerated, liquid

Labels 2.2

Packing Instruction P202

Other transport information

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. Ensure adequate ventilation. Avoid transport on vehicles where the load space is not separated from the driver's compartment. Before transporting product containers ensure that they are firmly secured. Ensure compliance with applicable regulations.

15 REGULATORY INFORMATION

Water pollution class

Not polluting to waters according to VwVwS from 27.07.2005.

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 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

NGL safety advice

No. 1 Handling of refrigerated liquid gases

No. 3 Oxygen deficiency

No. 11 Transport of gas receptacles in vehicles