

Page : 1/10

Revised edition n°: 10.0

Revision date: 03/2018

H280

MTG089A

Nitrogen

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade nameNitrogenChemical descriptionNitrogenCAS N°7727-37-9CE N°231-783-9

Index N° --

Registration n° Listed in Annex IV / V REACH, exempted from registration

Chemical formula N₂

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Industrial and professional

Test gas/Calibration gas

Purge gas, diluting gas, inerting gas

Use for manufacture of electronic/photovoltaic components

Laboratory use

Shield gas for welding processes

Uses advised against None

1.3. Details of the supplier of the safety data sheet

MULTIGAS

Company identification Route de l'Industrie 102

CH-1564 Domdidier

Phone number +41 (0) 26 676 94 94

E-mail address <u>info@multigas.ch</u>

1.4. Emergency telephone numbers

145 (Toxicology Centre Zurich) or +41 (0) 44 251 51 51

+41 (0) 26 676 94 94 (Multigas)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Physical hazards Gases under pressure : Compressed gas



Page : 2/10

Revised edition n°: 10.0

Revision date: 03/2018

MTG089A

Nitrogen

Environmental hazards

For the complete H-sentences texts mentioned in that chapter, refer to Section 16

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



GHS04

Signal word Warning

Hazard statements

H280 Contains gas under pressure; may explode if heated

Precautionary statements

P410+403 Protect from solar radiation. Store in a well-ventilated place

2.3. Other hazards

Asphyxiant in high concentrations

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	Concentration	Classification
Nitrogen	(CAS-No.) 7727-37-9 (EC-No.) 231-783-9 (EC Index-No.) (Registration-No.)	<= 100%	Press. Gas (Comp.), H280

For the complete H-sentences texts mentioned in that chapter, refer to Section 16 Contains no other components or impurities which will influence the classification of the product

3.2. Mixtures

Not established



Page : 3/10

Revised edition n°: 10.0

Revision date: 03/2018

MTG089A

Nitrogen

SECTION 4: First aid measures

4.1. Description of first aid measures

General advices See a doctor. Show this safety data sheet to the attending physician

In case of inhalation In case of inhalation, remove the person from the contaminated area. In

case of respiratory arrest, give artificial respiration. See a doctor

In case of skin contact

No adverse effects expected

No adverse effects expected

In case of ingestionNever give anything by mouth to an unconscious person. Rinse mouth with

water. See a doctor

4.2. Most important symptoms and effects, both acute and delayed

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation

Refer to section 11

4.3. Indication of any immediate medical attention and special treatment needed

Data not available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Water spray or water mist. Dry powder. Foam

Unsuitable extinguishing media Do not use water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards Exposure to fire may cause containers to rupture/explode

Hazardous combustion products -

5.3. Additional information

Cool endangered receptacles with water spray jet from a protected position

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours, spray mists or gases

Provide adequate ventilation Evacuate the staff to safe place

Personal protective equipment, see section 8



Page : 4/10

Revised edition n°: 10.0

Revision date: 03/2018

Nitrogen

MTG089A

6.2. Environmental precautions

-

6.3. Methods and material for containment and cleaning up

-

6.4. Reference to other sections

See also sections 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

See also sections 8 and 13

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool place. Keep container tightly closed in a dry and well-ventilated place. Pressurized contents

7.3. Specific end use(s)

_

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with occupational exposure limits

Component	CAS N°	Exposure value type	Value	Source
Nitrogen	7727-37-9	TWA	-	No occupational exposure limit value
			-	
		OEL	-	
			-	

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation

Oxygen detectors should be used when asphyxiating gases may be released



Page: 5/10

Revised edition n°: 10.0 Revision date: 03/2018

MTG089A

Nitrogen

8.2.2. Individual protection measures, e.g. personal protective equipment

Eye/face protection Wear safety glasses with side shields. Standard EN 166

Skin / hand protection Wear working gloves when handling gas containers. Standard EN 388 -

Protective gloves against mechanical risk

Respiratory protection Self-contained breathing apparatus (SCBA) or positive pressure airline with

mask are to be used in oxygen-deficient atmospheres. Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full

face mask

8.2.3. Environmental exposure controls

-

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state at 20°C /
 101.3kPa

Gas

Colour
 Colourless

Odour threshold Data not available

PH Data not available

Data not available

Melting point / Freezing point -210°C

Boiling point -196°C

Flash point Data not available Data not available **Evaporation rate** Flammability (solid, gas) Data not available **Explosive limits** Data not available Vapour pressure [20°C] Data not available Vapour pressure [50°C] Data not available Vapour density Data not available Relative density, liquid (water=1) Data not available

Relative density, gas (air=1) 0.97
Water solubility 20 mg/l

Partition coefficient Data not available

n-octanol/water (Log Kow)

Auto-ignition temperatureData not availableDecomposition temperatureData not availableViscosityData not available



Page : 6/10

Revised edition n°: 10.0

Revision date: 03/2018

MTG089A

Explosive propertiesData not availableOxidising propertiesData not available

Nitrogen

9.2. Other information

Molar mass 28 g/mol Critical temperature [°C] -147 °C

Relative vapour density

Gas/vapour heavier than air. May accumulate in confined spaces,

particularly at or below ground level

SECTION 10: Stability and reactivity

10.1. Reactivity

Data not available

10.2. Chemical stability

Stable under the recommended storage conditions

10.3. Possibility of hazardous reactions

Data not available

10.4. Conditions to avoid

Data not available

10.5. Incompatible materials

None

For additional information on compatibility refer to ISO 11114 standard

10.6. Hazardous decomposition products

Data not available

SECTION 11: Toxicological information

11.1. Chemical safety assessment

Acute toxicityData not availableSkin corrosion/irritationData not availableSerious eye damage/irritationData not availableRespiratory or skin sensitisationData not availableGerm cell mutagenicityData not available



Page: 7/10

Revised edition n°: 10.0

Revision date: 03/2018

Nitrogen

MTG089A

CarcinogenicityData not availableReproductive toxicityData not availableSTOT-single exposure – TargetData not available

organ(s)

STOT-repeated exposure Data not available
Aspiration hazard Data not available

SECTION 12: Ecological information

12.1. Toxicity

Assessment No ecological damage caused by this product

12.2. Persistence and degradability

Data not available

12.3. Bioaccumulative potential

Data not available

12.4. Mobility in soil

Data not available

12.5. Results of PBT and vPvB assessment

Not classified as PBT or vPvB

12.6. Other adverse effects

Data not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product May be vented to atmosphere in a well-ventilated place

Do not discharge into any place where its accumulation could be dangerous

Contaminated container Return unused product in original cylinder to supplier

OMoD Code 16 05 05

Gases in pressure containers other than those mentioned in 16 05 04.



Page : 8/10

Revised edition n°: 10.0

Revision date: 03/2018

MTG089A

Nitrogen

SECTION 14: Transport information

14.1. UN number

Transport par road/rail ADR / RID	Transport by sea IMDG	Transport by air IATA
1066	1066	1066

14.2. UN proper shipping name

Transport par road/rail ADR / RID	Transport by sea IMDG	Transport by air IATA
Nitrogen, compressed	Nitrogen, compressed	Nitrogen, compressed

14.3. Transport hazard class(es)

Labelling

2

ADR/RID

IMDG IATA 2.2 : Non-flammable, non-toxic gases

14.4. Packing group

ADR/RID IMDG

IATA

14.5. Environmental hazards

ADR/RID No
IMDG No
ICAO-TI / IATA-DGR No

14.6. Special precautions for user

Data not available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture



Page : 9/10

Revised edition n°: 10.0

Revision date: 03/2018

MTG089A

Nitrogen

This safety data sheet complies with the requirements of Regulation (CE) No. 1907/2006

15.2. Chemical safety assessment

A CSA does not need to be carried out for this product

SECTION 16: Other information

Indication of changes Revised safety data sheet in accordance with commission regulation (EU)

No 2015/830

Abbreviations and acronyms ADR: European Agreement concerning the International Carriage

of Dangerous Goods by Road

CAS: Chemical Abstract Service number (USA)

CLP : Classification Labelling Packaging Regulation; Regulation

(EC) No 1272/2008

CSA: Chemical Safety Assessment

EIGA: European Industrial Gases Association

EINECS: European Inventory of Existing Commercial Chemical

Substances

EN: European Standard
ATE: Acute Toxicity Estimate

IATA: International Air Transport Association

IMDG Code : International Maritime Dangerous Goods Code
LC50 : Lethal Concentration to 50 % of a test population
OMoD : Swiss Ordinance on the movement of waste

PBT : Persistent, Bioaccumulative and Toxic
PPE: Personal Protection Equipment

REACH: Registration, Evaluation, Authorisation and Restriction of

Chemicals Regulation (EC) No 1907/2006

RID: Regulations concerning the international carriage of

dangerous goods by rail

RMM: Risk Management Measures

STOT-SE: Specific Target Organ Toxicity - Single Exposure

UN: United Nations

vPvB: Very Persistent and Very Bioaccumulative

WGK: Water Hazards Class

Full text of H, EUH and P statements used in sections 2 and 3

Hazard statements

H280 Contains gas under pressure; may explode if heated

Precautionary statements

P410+403 Protect from solar radiation. Store in a well-ventilated place



Page : 10/10

Revised edition n°: 10.0

Revision date: 03/2018

Nitrogen

MTG089A

Disclaimer of liability

Details given in this document have been prepared based on the most available reliable documents and are believed to be correct at the time of going to press

They do not claim to be exhaustive and should be considered as a guide