

Mixture Sulphur dioxide 50% - Nitrogen 50%
MTGXXX
SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1. Product identifier

| | |
|----------------------|--|
| Trade name | Mixture Sulphur dioxide 50% - Nitrogen 50% |
| Chemical description | Sulphur dioxide 50% - Nitrogen 50% |
| CAS N° | - |
| CE N° | - |
| Index N° | - |
| Registration n° | - |
| Chemical formula | SO ₂ , N ₂ |

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

| | |
|--------------------------|---|
| Relevant identified uses | Industrial and professional Analysis, calibration Laboratory use Contact supplier for more information on uses |
| Uses advised against | For use by industrial or professional users only |

1.3. Details of the supplier of the safety data sheet

| | |
|------------------------|---|
| Company identification | MULTIGAS Route de l'Industrie 102 CH-1564 Domdidier |
| Phone number | +41 (0) 26 676 94 94 |
| E-mail address | info@multigas.ch |

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]

| | |
|---|------|
| Gases under pressure : Liquefied gas | H280 |
| Skin corrosion/irritation, Category 1B | H314 |
| Serious eye damage Category 1 | H318 |
| Acute toxicity (inhalation: gas) Category 4 | H332 |

Mixture Sulphur dioxide 50% - Nitrogen 50%

MTGXXX

Specific target organ toxicity (single exposure) Category 3

H335

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

GHS05

GHS07

Signal word

Danger

Hazard statements

- H280 Contains gas under pressure; may explode if heated
- H314 Causes severe skin burns and eye damage
- H332 Harmful if inhaled
- H335 May cause respiratory irritation
- EUH071 Corrosive to the respiratory system

Precautionary statements

- P280 Wear protective gloves, protective clothing, eye protection, face protection
- P303+P361+P353+P315 IF ON SKIN: (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get immediate medical advice / attention
- P304+P340+P315 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice / attention
- P305+P351+P338+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice / attention
- P410+P403 Protect from sunlight. Store in a well-ventilated place
- P405 Store locked up

2.3. Other hazards

Exposure may worsen the situation of people with pre-existing eye, skin or respiratory disorders. Prolonged exposure to gas or overexposure to concentrated gas may cause loss of consciousness, possible lung tissue damage, decreased lung function, spinal cord spasm, chemical pneumonitis, throat inflammation (bronchitis) and respiratory paralysis. Contact with the product may cause cold burns or frostbite

Mixture Sulphur dioxide 50% - Nitrogen 50%
MTGXXX
SECTION 3: Composition/information on ingredients
3.1. Substances

| Name | Product identifier | Concentration | Classification |
|-----------------|--|---------------|--|
| Sulphur dioxide | (CAS-No.) 7446-09-5 (EC-No.) 231-195-2 (EC Index-No.) 016-011-00-9 (Registration-No.) 01-2119485028-34 | 50% | Press. Gas (Liq.), H280 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 3 (Inhalation: gas), H331 |
| Nitrogen | (CAS-No.) 7727-37-9 (EC-No.) 231-783-9 (EC Index-No.) --- (Registration-No.) -- | 50% | 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

SECTION 4: First aid measures
4.1. Description of first aid measures

| | |
|--------------------------------|---|
| General advice | 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 | Remove contaminated clothing and shoes immediately. Wash with soap and plenty of water. Take victim immediately to hospital. See a doctor |
| In case of eyes contact | Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor |
| In case of ingestion | Do NOT induce vomiting. Never 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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

Treat with corticosteroid spray as soon as possible after inhalation

Mixture Sulphur dioxide 50% - Nitrogen 50%

MTGXXX

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|---------------------------------------|---|
| Suitable extinguishing media | The product itself does not burn 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 | In case of fire or excessive heat, hazardous combustion products may be produced Exposure to fire may cause containers to rupture/explode |
| Hazardous combustion products | In case of fire or excessive heat, hazardous combustion products may be produced such as : sulphur oxides |

5.3. Additional information

Wear self-contained breathing apparatus for firefighting, if necessary.
(Standard EN137 - Self-contained open-circuit compressed air apparatus with full face mask)

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 personnel to a safe place
Personal protective equipment, see section 8

6.2. Environmental precautions

Try to stop the leak
Decrease vapour by water spray in the form of fog or fine droplets

6.3. Methods and material for containment and cleaning up

Hose down area with water
Keep area evacuated and free from ignition sources until any spilled liquid has evaporated (ground free from frost)
Wash contaminated equipment or sites of leaks with copious quantities of water

6.4. Reference to other sections

See also sections 8 and 13

Mixture Sulphur dioxide 50% - Nitrogen 50%

MTGXXX

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes
 Avoid breathing vapour or mist
 Keep away from sources of ignition - No smoking
 For precautions, see section 2.2

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
 Content under pressure

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 | Control parameter | Source |
|-----------------|-----------|---------------------|-----------------------|--|
| Sulphur dioxide | 7446-09-5 | TWA | 0.5 ppm | SUVA: Limit values of exposure to workstations |
| | | | 1.3 mg/m ³ | |
| | | OEL | 1 ppm | SUVA: Limit values of exposure to workstations |
| | | | 2.7 mg/m ³ | |
| 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
 Gas detectors should be used when toxic gases may be released

| | | |
|---|-------------------------|---------------------------|
|  | SAFETY DATASHEET | Page : 6/11 |
| | | Revised edition n° : 10.0 |
| | | Revision date : 10/2023 |
| Mixture Sulphur dioxide 50% - Nitrogen 50% | | MTGXXX |

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

| | |
|-------------------------------|--|
| Eye/face protection | Wear goggles and a face shield when transfilling or breaking transfer connections. Standard EN 166 |
| Skin / hand protection | <p>Wear protective gloves when handling gas cylinders. Standard EN 388</p> <p>Wear cold insulating gloves when transferring or disconnecting transfer lines Standard EN 511</p> <p>Wearing chemical resistant gloves Standard EN 374</p> <p>For long-term use</p> <p>Material: Fluoroelastomer</p> <p>Glove thickness: 0.7 mm</p> <p>Penetration time:480 min</p> <p>For short-term use</p> <p>Material: Chloroprene rubber</p> <p>Glove thickness: 0.4 mm</p> <p>Penetration time:30 min</p> <p>Have appropriate, chemical-resistant protective clothing ready for use in emergencies. Standard EN943-1</p> |
| Respiratory protection | Self-contained breathing apparatus (SCBA) or positive pressure air mask must be used in oxygenated atmospheres. Standard EN 137 - Self-contained compressed air device with a full face mask |

8.2.3. Environmental exposure controls

Avoid any spill or leak if it can be done safely

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 Mixture containing one or more components that have the following odour:
Pungent

Odour threshold No data available

pH No data available

Melting point / Freezing point No data available

Boiling point No data available

Flash point No data available

Evaporation rate No data available

Flammability (solid, gas) Non-flammable

Explosive limits No data available

Vapour pressure [20°C] No data available

Mixture Sulphur dioxide 50% - Nitrogen 50%
MTGXXX

| | |
|--|-------------------|
| Vapour pressure [50°C] | No data available |
| Vapour density | No data available |
| Relative density, liquid (water=1) | No data available |
| Relative density, gas (air=1) | 1.5885 |
| Water solubility | No data available |
| Partition coefficient n-octanol/water (Log Kow) | No data available |
| Auto-ignition temperature | No data available |
| Decomposition temperature | No data available |
| Viscosity | No data available |
| Explosive properties | No data available |
| Oxidising properties | No data available |

9.2. Other information

| | |
|---------------------------|---|
| Molar mass | 46 g/mol |
| Critical temperature [°C] | No data available |
| 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

No reactivity hazard other than the effects described in sub-sections below

10.2. Chemical stability

Stable under recommended storage conditions

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

None under recommended conditions of use and storage

10.5. Incompatible materials

Reacts with water to form corrosive acids
 Oxidants
 Strong bases
 Brass, zinc
 For additional information on compatibility refer to ISO 11114

Mixture Sulphur dioxide 50% - Nitrogen 50%

MTGXXX

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced

SECTION 11: Toxicological information

11.1. Chemical safety assessment

| | |
|---|---|
| Acute toxicity | Toxic if inhaled |
| Skin corrosion/irritation | Causes severe skin burns and eye damage |
| Serious eye damage/irritation | No data available |
| Respiratory or skin sensitisation | No data available |
| Germ cell mutagenicity | No data available |
| Carcinogenicity | No data available |
| Reproductive toxicity | No data available |
| STOT-single exposure – Target organ(s) | No data available |
| STOT-repeated exposure | No data available |
| Ingestion hazard | No data available |

11.2. Information on other hazards

The mixture has no endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

| | |
|-------------------|-------------------------------------|
| Assessment | Classification criteria are not met |
|-------------------|-------------------------------------|

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

PBT / vPvB assessment is not available because the chemical safety assessment is not required / is not conducted

Mixture Sulphur dioxide 50% - Nitrogen 50%

MTGXXX

12.6. Endocrine-disrupting properties

The substance/mixture has no endocrine disrupting properties

12.7. Other adverse effects

Effect on the ozone layer: No known effect with this product.
 Ozone depletion potential: None.
 Effect on global warming: No known effect with this product.
 Global warming potential: None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product Must not be released into the atmosphere
 Burn in a chemical incinerator equipped with an afterburner and scrubber
 Return to the supplier the product not consumed in its original container

Contaminated container Eliminate as unused product
 Contact the supplier if instructions are needed

OMoD Code 16 05 05
 Gases in pressure containers (including halons) other than those mentioned in 16 05 04

SECTION 14: Transport information

14.1. UN number

| Transport par road/rail ADR / RID | Transport by sea IMDG | Transport by air IATA |
|--------------------------------------|--------------------------|--------------------------|
| 1956 | 1956 | 1956 |

14.2. UN proper shipping name

| Transport par road/rail ADR / RID | Transport by sea IMDG | Transport by air IATA |
|--|--|---|
| COMPRESSED GAS, N.O.S., (Sulphur dioxide, Nitrogen) | COMPRESSED GAS, N.O.S., (Sulphur dioxide, Nitrogen) | Compressed gas, n.o.s., (Sulphur dioxide, Nitrogen) |

14.3. Transport hazard class(es)

Labelling



ADR/RID
 IMDG
 IATA

2.2 : Non-flammable, non-toxic gases

Mixture Sulphur dioxide 50% - Nitrogen 50%

MTGXXX

14.4. Packing group

| | |
|-------------------------|-----------------|
| ADR/RID IMDG IATA | Not established |
|-------------------------|-----------------|

14.5. Environmental hazards

| | |
|---------------------------------------|----------------------|
| ADR/RID IMDG ICAO-TI / IATA-DGR | None None None |
|---------------------------------------|----------------------|

14.6. Special precautions for user

No data 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

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

15.2. Chemical safety assessment

A CSA has been carried out

SECTION 16: Other information

Indication of changes Revised safety data sheet in accordance with commission regulation (EU) No 2015/830

Abbreviations and acronyms

| | |
|--|---|
| ADR : CAS : CLP : CSA : EIGA : EINECS : EN : ATE : IATA : IMDG Code : LC50 : | European Agreement concerning the International Carriage of Dangerous Goods by Road Chemical Abstract Service number (USA) Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 Chemical Safety Assessment European Industrial Gases Association European Inventory of Existing Commercial Chemical Substances European Standard Acute Toxicity Estimate International Air Transport Association International Maritime Dangerous Goods Code Lethal Concentration to 50 % of a test population |
|--|---|

Mixture Sulphur dioxide 50% - Nitrogen 50%

MTGXXX

| | |
|-----------|---|
| 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 |
| H314 | Causes severe skin burns and eye damage |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation |

Precautionary statements

| | |
|---------------------|---|
| P280 | Wear protective gloves, protective clothing, eye protection, face protection |
| P303+P361+P353+P315 | IF ON SKIN: (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Get immediate medical advice / attention |
| P304+P340+P315 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get immediate medical advice / attention |
| P305+P351+P338+P315 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice / attention |
| P410+P403 | Protect from sunlight. Store in a well-ventilated place |
| P405 | Store locked up |

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