Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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

1.1. Product identifier
Product form : Mixture
Product name : Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen
Replaces ISC MSDS No. : 1810-8770, 1810-8774, 1810-9259

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture : Test gas/Calibration gas.

1.3. Details of the supplier of the safety data sheet
U.S. Supplier: Industrial Scientific Corporation
1 Life Way
Pittsburgh, PA 15205-7500
Phone (412) 788-4353
TOLL-FREE 800-DETECTS
Fax (412) 788-8353

MANUFACTURER: CALGAZ
821 Chesapeake Drive
Cambridge, MD 21613

1.4. Emergency telephone number
Emergency number : CHEMTREC: 1-800-424-9300
Internationally: 1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)
Compressed gas H280
Full text of H-phrases: see section 16

2.2. Label elements
GHS-US labeling
Hazard pictograms (GHS-US)
Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : H280 - Contains gas under pressure; may explode if heated
Precautionary statements (GHS-US) : P202 - Do not handle until all safety precautions have been read and understood
P271 - Use only outdoors or in a well-ventilated area
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P313 - Get medical advice/attention
CGA-PG05 - Use a back flow preventive device in the piping
CGA-PG21 - Open valve slowly
CGA-PG06 - Close valve after each use and when empty
CGA-PG10 - Use only with equipment rated for cylinder pressure
CGA-PG14 - Approach suspected leak area with caution
CGA-PG02 - Protect from sunlight when ambient temperature exceeds 52°C (125°F)
P403 - Store in a well-ventilated place
Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen</td>
<td>(CAS No) 7727-37-9</td>
<td>80.185 - 99.989</td>
<td>Compressed gas, H280</td>
</tr>
<tr>
<td>Oxygen</td>
<td>(CAS No) 7782-44-7</td>
<td>0 - 19</td>
<td>Flam. Gas 1, H270</td>
</tr>
<tr>
<td>n-Pentane</td>
<td>(CAS No) 109-66-0</td>
<td>0.01 - 0.75</td>
<td>Flam. Liq. 2, H225, STOT SE 3, H336, Asp. Tox. 1, H304, Aquatic Chronic 2, H411, STOT RE 1, H372</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>(CAS No) 630-08-0</td>
<td>0.0005 - 0.09</td>
<td>Flam. Gas 1, H220, Compressed gas, H280, Acute Tox. 3 (Inhalation:gas), H331, Repr. 1A, H360, STOT RE 1, H372</td>
</tr>
<tr>
<td>Sulfur dioxide</td>
<td>(CAS No) 7446-09-5</td>
<td>0.0005 - 0.025</td>
<td>Liquefied gas, H280, Acute Tox. 3 (Inhalation:gas), H331, Skin Corr. 1B, H314, Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.
First-aid measures after skin contact: Adverse effects not expected from this product.
First-aid measures after eye contact: Adverse effects not expected from this product.
First-aid measures after ingestion: Ingestion is not considered a potential route of exposure.

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

Symptoms/injuries: Adverse effects not expected from this product.
Symptoms/injuries after inhalation: May displace oxygen and cause rapid suffocation.
Symptoms/injuries after skin contact: Adverse effects not expected from this product.
Symptoms/injuries after eye contact: Adverse effects not expected from this product.
Symptoms/injuries after ingestion: Ingestion is not considered a potential route of exposure.
Symptoms/injuries upon intravenous administration: Not known.
Chronic symptoms: Adverse effects not expected from this product.

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

If you feel unwell, seek medical advice. If breathing is difficult, give oxygen.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media: Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard: The product is not flammable.
Explosion hazard: Product is not explosive. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
Oxygen (0 - 19%) Pentane (0.01 - 0.75%) Carbon Monoxide (0.0005-0.09%) Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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Reactivity : None known.

5.3. Advice for firefighters
Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire.
Protection during firefighting : Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for firefighters. Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures
6.1. Personal precautions, protective equipment and emergency procedures
General measures : Ensure adequate ventilation.

6.1.1. For non-emergency personnel
Protective equipment : Wear protective equipment consistent with the site emergency plan.

6.1.2. For emergency responders
Protective equipment : Standard protective clothing and equipment (e.g., Self Contained Breathing Apparatus) for fire fighters. Equip cleanup crew with proper protection.
Emergency procedures : Evacuate and limit access. Ventilate area.

6.2. Environmental precautions
Try to stop release if safe to do so.

6.3. Methods and material for containment and cleaning up
For containment : Try to stop release if safe to do so.
Methods for cleaning up : Dispose of this material and its container in accordance with local regulations.

6.4. Reference to other sections
See also Sections 8 and 13.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use. Use equipment rated for cylinder pressure.
Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area.
Safe use of the product : Only experienced and properly instructed persons should handle gases under pressure. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.
Hygiene measures : Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures : Comply with applicable regulations.
Storage conditions : Do not expose to temperatures exceeding 52°C (125°F). Keep container closed when not in use. Protect cylinder from physical damage. Store in well ventilated area.
Incompatible products : None known.
Incompatible materials : None known.

7.3. Specific end use(s)
Test gas/Calibration gas.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters

<table>
<thead>
<tr>
<th></th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen (0 - 19%)</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Pentane (0.01 - 0.75%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon Monoxide (0.0005-0.09%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfur Dioxide (0.0005-0.025%)</td>
<td></td>
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</tr>
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</table>
Oxygen (0 - 19%) Pentane (0.01 - 0.75%) Carbon Monoxide (0.0005-0.09%) Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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<tr>
<td>ACGIH</td>
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<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>n-Pentane (109-66-0)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (ppm)</td>
<td>600 ppm</td>
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<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
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</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Carbon monoxide (630-08-0)</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>ACGIH TWA (ppm)</td>
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<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>55 mg/m³</td>
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<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>50 ppm</td>
</tr>
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</table>

<table>
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<th>Nitrogen (7727-37-9)</th>
<th></th>
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</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>OSHA</td>
<td>Not applicable</td>
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</table>

<table>
<thead>
<tr>
<th>Sulfur dioxide (7446-09-5)</th>
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</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>ACGIH STEL (ppm)</td>
<td>0.25 ppm</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (mg/m³)</td>
<td>13 mg/m³</td>
</tr>
<tr>
<td>OSHA</td>
<td>OSHA PEL (TWA) (ppm)</td>
<td>5 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls: Ensure exposure is below occupational exposure limits. Provide adequate general and local exhaust ventilation. Systems under pressure should be regularly checked for leakages. Consider work permit system e.g. for maintenance activities.


Skin and body protection: Wear suitable protective clothing, e.g. lab coats, coveralls or flame resistant clothing.

Respiratory protection: None necessary during normal and routine operations. See Sections 5 & 6.

Thermal hazard protection: None necessary during normal and routine operations.

Environmental exposure controls: Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment.


SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Gas
Appearance: Clear, colorless gas.
Molecular mass: Not applicable for gas-mixtures.
Color: Colorless
Odor: sulfide-like; Pungent.
Odor threshold: No data available
pH: Not applicable for gas-mixtures.
Relative evaporation rate (butyl acetate=1): No data available
Relative evaporation rate (ether=1): Not applicable for gas-mixtures.
Melting point: No data available
Freezing point: No data available
Boiling point: No data available
Flash point: No data available
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): Not applicable - not flammable
Vapor pressure: Not applicable.
Relative vapor density at 20 °C: No data available
Relative density: No data available
Relative gas density: Heavier than air.
Solubility: Water: Solubility in water of component(s) of the mixture:
• : 39 mg/l  • : < 1 mg/l  • : Insoluble  • :  • : 20 mg/l
Log Pow: Not applicable for gas-mixtures.
Log Kow: Not applicable for gas-mixtures.
Viscosity, kinematic: Not applicable.
Viscosity, dynamic: Not applicable.
Explosive properties: Not applicable - not flammable.
Explosive limits: Not applicable - not flammable.

9.2. Other information
Additional information: Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

SECTION 10: Stability and reactivity

10.1. Reactivity
None known.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
None known.

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. Information on toxicological effects
Acute toxicity: Not classified

Oxygen (7782-44-7)
LC50 inhalation rat (ppm) 800000 ppm/4h

n-Pentane (109-66-0)
LD50 dermal rabbit 3000 mg/kg
LC50 inhalation rat (mg/l) 364 g/m³ (Exposure time: 4 h)
LC50 inhalation rat (ppm) 123317.17 ppm/4h
ATE US (dermal) 3000.000 mg/kg body weight
ATE US (gases) 123317.170 ppmV/4h
ATE US (vapors) 364.000 mg/l/4h
ATE US (dust, mist) 364.000 mg/l/4h

Carbon monoxide (630-08-0)
LC50 inhalation rat (ppm) 1880 ppm/4h
ATE US (gases) 1880.000 ppmV/4h
Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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SECTION 11: First aid measures

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitization: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Not classified
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified
Symptoms/injuries after inhalation: May displace oxygen and cause rapid suffocation.
Symptoms/injuries after skin contact: Averse effects not expected from this product.
Symptoms/injuries after eye contact: Averse effects not expected from this product.
Symptoms/injuries after ingestion: Ingestion is not considered a potential route of exposure.
Symptoms/injuries upon intravenous administration: Not known.
Chronic symptoms: Averse effects not expected from this product.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: No ecological damage caused by this product.

n-Pentane (109-66-0)
LC50 fish 1 9.87 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1 9.74 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2 11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

Oxygen (7782-44-7)
Persistence and degradability: No data available.

Carbon monoxide (630-08-0)

Nitrogen (7727-37-9)
Persistence and degradability: No ecological damage caused by this product.

Sulfur dioxide (7446-09-5)
Persistence and degradability: Not applicable for inorganic gases.
Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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12.3. Bioaccumulative potential

<table>
<thead>
<tr>
<th>Compound</th>
<th>Log Pow</th>
<th>Bioaccumulative potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen (7782-44-7)</td>
<td>Not applicable for inorganic gases.</td>
<td>No ecological damage caused by this product.</td>
</tr>
<tr>
<td>n-Pentane (109-66-0)</td>
<td>3.39</td>
<td></td>
</tr>
<tr>
<td>Carbon monoxide (630-08-0)</td>
<td>1.78</td>
<td></td>
</tr>
<tr>
<td>Nitrogen (7727-37-9)</td>
<td>Not applicable for inorganic gases.</td>
<td>No ecological damage caused by this product.</td>
</tr>
<tr>
<td>Sulfur dioxide (7446-09-5)</td>
<td>(no bioaccumulation expected)</td>
<td></td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

<table>
<thead>
<tr>
<th>Compound</th>
<th>Mobility in soil</th>
<th>Ecology - soil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxygen (7782-44-7)</td>
<td>No data available.</td>
<td>No ecological damage caused by this product.</td>
</tr>
<tr>
<td>Carbon monoxide (630-08-0)</td>
<td></td>
<td>Because of its high volatility, the product is unlikely to cause ground or water pollution.</td>
</tr>
<tr>
<td>Nitrogen (7727-37-9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfur dioxide (7446-09-5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.5. Other adverse effects

| Effect on ozone layer          | None.          |
| Effect on the global warming   | Contains greenhouse gas(es) not covered by 842/2006/EC. |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| Waste treatment methods       | Contact supplier if guidance is required. May be vented to atmosphere. Do not discharge into any place where its accumulation could be dangerous. Ensure that the emission levels from local regulations or operating permits are not exceeded. |
| Waste disposal recommendations | Refer to the CGA Pamphlet P-63 "Disposal of Gases" available at www.cganet.com for more guidance on suitable disposal methods. |

SECTION 14: Transport information

In accordance with DOT

| Transport document description | UN1956 Compressed gas, n.o.s. (Oxygen, Nitrogen) |
| UN-No.(DOT)                    | UN1956                                                |
| Proper Shipping Name (DOT)     | Compressed gas, n.o.s.                                 |
Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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Hazard labels (DOT) : 2.2 - Non-flammable gas

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Packaging Exceptions (49 CFR 173.xxx) : 306;307

DOT Packaging Non Bulk (49 CFR 173.xxx) : 302;305

DOT Packaging Bulk (49 CFR 173.xxx) : 314;315

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 75 kg

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 150 kg

DOT Vessel Stowage Location : A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

Additional information

Other information : No supplementary information available.

Special transport precautions : 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 there is adequate ventilation. - Ensure that containers are firmly secured. - Ensure cylinder valve is closed and not leaking. - Ensure valve outlet cap nut or plug (where provided) is correctly fitted. - Ensure valve protection device (where provided) is correctly fitted.

ADR

No additional information available

Transport by sea

UN-No. (IMDG) : 1956

Proper Shipping Name (IMDG) : COMPRESSED GAS, N.O.S.

Class (IMDG) : 2.2 - Non-flammable, non-toxic gases

Air transport

UN-No.(IATA) : 1956

Proper Shipping Name (IATA) : COMPRESSED GAS, N.O.S.

Class (IATA) : 2

SECTION 15: Regulatory information

15.1. US Federal regulations

Oxygen (7782-44-7) List on the United States TSCA (Toxic Substances Control Act) inventory

n-Pentane (109-66-0) List on the United States TSCA (Toxic Substances Control Act) inventory

EPA TSCA Regulatory Flag T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

Carbon monoxide (630-08-0) List on the United States TSCA (Toxic Substances Control Act) inventory

Nitrogen (7727-37-9) List on the United States TSCA (Toxic Substances Control Act) inventory

Sulfur dioxide (7446-09-5) List on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the United States SARA Section 302

SARA Section 302 Threshold Planning Quantity (TPQ) 500
Oxygen (0 - 19%,) Pentane (0.01 - 0.75%,) Carbon Monoxide (0.0005-0.09%,) Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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15.2. International regulations

CANADA

Oxygen (7782-44-7)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification
Class A - Compressed Gas
Class C - Oxidizing Material

n-Pentane (109-66-0)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification
Class B Division 2 - Flammable Liquid

Carbon monoxide (630-08-0)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification
Class A - Compressed Gas
Class B Division 1 - Flammable Gas
Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects
Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Nitrogen (7727-37-9)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification
Class A - Compressed Gas

Sulfur dioxide (7446-09-5)
Listed on the Canadian DSL (Domestic Substances List)
WHMIS Classification
Class A - Compressed Gas
Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects
Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Class E - Corrosive Material

EU-Regulations

Oxygen (7782-44-7)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

n-Pentane (109-66-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Carbon monoxide (630-08-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Nitrogen (7727-37-9)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Sulfur dioxide (7446-09-5)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

15.2.2. National regulations

Oxygen (7782-44-7)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

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15.3. US State regulations

Carbon monoxide (630-08-0)

<table>
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<tr>
<th></th>
<th>U.S. - California - Prop 65 - Carcinogens List</th>
<th>U.S. - California - Prop 65 - Developmental Toxicity</th>
<th>U.S. - California - Prop 65 - Reproductive Toxicity - Male</th>
<th>U.S. - California - Prop 65 - Reproductive Toxicity - Female</th>
<th>No significance risk level (NSRL)</th>
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</thead>
<tbody>
<tr>
<td>U.S. - California -</td>
<td>Carcinogens List</td>
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<td>Reproductive Toxicity - Male</td>
<td>Reproductive Toxicity - Female</td>
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</table>

Sulfur dioxide (7446-09-5)

<table>
<thead>
<tr>
<th></th>
<th>U.S. - California - Prop 65 - Carcinogens List</th>
<th>U.S. - California - Prop 65 - Developmental Toxicity</th>
<th>U.S. - California - Prop 65 - Reproductive Toxicity - Male</th>
<th>U.S. - California - Prop 65 - Reproductive Toxicity - Female</th>
<th>No significance risk level (NSRL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. - California -</td>
<td>Carcinogens List</td>
<td>Developmental Toxicity</td>
<td>Reproductive Toxicity - Male</td>
<td>Reproductive Toxicity - Female</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Oxygen (7782-44-7)

<table>
<thead>
<tr>
<th></th>
<th>U.S. - Massachusetts - Right To Know List</th>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
<th>U.S. - Pennsylvania - RTK (Right to Know) List</th>
</tr>
</thead>
</table>

n-Pentane (109-66-0)

<table>
<thead>
<tr>
<th></th>
<th>U.S. - Massachusetts - Right To Know List</th>
<th>U.S. - New Jersey - Right to Know Hazardous Substance List</th>
<th>U.S. - Pennsylvania - RTK (Right to Know) List</th>
</tr>
</thead>
</table>

P/N3594

02/20/2015 EN (English US) SDS ID: 50225 10/11
Oxygen (0 - 19%), Pentane (0.01 - 0.75%), Carbon Monoxide (0.0005-0.09%), Sulfur Dioxide (0.0005-0.025%) in balance Nitrogen

Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Carbon monoxide (630-08-0)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Nitrogen (7727-37-9)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Sulfur dioxide (7446-09-5)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information
Indication of changes : Revised safety data sheet in accordance with OSHA final rule on GHS implementation promulgated March 26, 2012.
Revision date : 09/18/2014
Other information : This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this product.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Inhalation:gas)</th>
<th>Acute toxicity (inhalation:gas) Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic 2</td>
<td>Hazardous to the aquatic environment - Chronic Hazard Category 2</td>
</tr>
<tr>
<td>Asp. Tox. 1</td>
<td>Aspiration hazard Category 1</td>
</tr>
<tr>
<td>Compressed gas</td>
<td>Gases under pressure Compressed gas</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Flam. Gas 1</td>
<td>Flammable gases Category 1</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids Category 2</td>
</tr>
<tr>
<td>Liquefied gas</td>
<td>Gases under pressure Liquefied gas</td>
</tr>
<tr>
<td>Ox. Gas 1</td>
<td>Oxidizing gases Category 1</td>
</tr>
<tr>
<td>Repr. 1A</td>
<td>Reproductive toxicity Category 1A</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation Category 1B</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity (repeated exposure) Category 1</td>
</tr>
<tr>
<td>STOT SE 3</td>
<td>Specific target organ toxicity (single exposure) Category 3</td>
</tr>
<tr>
<td>H220</td>
<td>Extremely flammable gas</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapor</td>
</tr>
<tr>
<td>H270</td>
<td>May cause or intensify fire; oxidizer</td>
</tr>
<tr>
<td>H280</td>
<td>Contains gas under pressure; may explode if heated</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness</td>
</tr>
<tr>
<td>H360</td>
<td>May damage fertility or the unborn child</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)
This Safety Data Sheet is offered pursuant to OSHA’s Hazard Communication Standard, 29 CFR, 1910.1200. Other government regulations must be reviewed for applicability to this gas mixture. To the best of Calgaz’s knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either express or implied, are provided. The information contained herein relates only to this specific product. If this gas mixture is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.