# Carb Cleaner

Safety Data Sheet

According to SANS 10234:2008 and SANS 11014:2010

Date of issue:28/01/2020 Revision date: : Version: 1.0

## SECTION 1: Identification

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Trade name | : | Carb Cleaner |
| Type of product | : | Cleaning agent |
| Product code | : | SH212 |
| Product group | : | Trade product |

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

No additional information available

### 1.3. Supplier's details

**Manufacturer**
Shield Chemicals (Pty) Ltd
9 London Rd
Apex
P.O. Box 1939
1501 Benoni - South Africa
T (011) 421 7111
info@shieldchem.co.za

### 1.4. Emergency telephone number

Emergency number : (011) 421 7111

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to the United Nations GHS**

| | |
|---|---|
| Aerosol, Category 1 | H222;H229 |
| Acute toxicity (dermal), Category 5 | H313 |
| Skin corrosion/irritation, Category 2 | H315 |
| Germ cell mutagenicity, Category 1B | H340 |
| Carcinogenicity, Category 1B | H350 |
| Specific target organ toxicity — Single exposure, Category 1 | H370 |
| Specific target organ toxicity — Single exposure, Category 3, Narcosis | H336 |
| Specific target organ toxicity — Repeated exposure, Category 1 | H372 |
| Hazardous to the aquatic environment — Acute Hazard, Category 2 | H401 |
| Hazardous to the aquatic environment — Chronic Hazard, Category 3 | H412 |

Full text of H statements : see section 16

### 2.2. Label elements

**Labelling according to the United Nations GHS**

Hazard pictograms (GHS-ZA) :

GHS02 GHS07 GHS08

Signal word (GHS-ZA) : Danger

Hazard statements (GHS-ZA) :
H222 - Extremely flammable aerosol.
H229 - Pressurised container: May burst if heated.
H313 - May be harmful in contact with skin
H315 - Causes skin irritation.
H336 - May cause drowsiness or dizziness.
H340 - May cause genetic defects.
H350 - May cause cancer.
H370 - Causes damage to organs.
H372 - Causes damage to organs through prolonged or repeated exposure.
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS-ZA) :
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.

P251 - Do not pierce or burn, even after use.
P260 - Do not breathe spray.
P261 - Avoid breathing spray.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308+P311 - IF exposed or concerned: Call a POISON CENTER, a doctor.
P308+P313 - IF exposed or concerned: Get medical attention, medical advice.
P312 - Call a POISON CENTER, a doctor if you feel unwell.
P314 - Get medical attention, medical advice if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label)
P332+P313 - If skin irritation occurs: Get medical advice.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501 - Dispose of contents and container to an approved waste disposal plant.

### 2.3. Other hazards

Adverse physicochemical, human health and environmental effects : Highly flammable liquid and vapour,Causes mild skin irritation,Toxic to aquatic life,Harmful to aquatic life with long lasting effects.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to the United Nations GHS |
|---|---|---|---|
| toluene | (CAS-No.) 108-88-3 | 25.0 - 30.0 | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>STOT RE 2, H373<br>Asp. Tox. 1, H304 |
| 2-propanol | (CAS-No.) 67-63-0 | 15.0 - 20.0 | Flam. Liq. 2, H225<br>Acute Tox. Not classified (Oral)<br>Acute Tox. Not classified (Dermal)<br>STOT SE 3, H336<br>Asp. Tox. 2, H305<br>Aquatic Acute Not classified |
| butane, liquefied, under pressure | (CAS-No.) 106-97-8 | 10.0 - 20.0 | Pyr. Gas Not classified<br>Flam. Gas 1, H220<br>Aquatic Acute 2, H401 |
| Acetone | (CAS-No.) 67-64-1 | 10.0 - 20.0 | Flam. Liq. 2, H225<br>Acute Tox. Not classified (Oral)<br>STOT SE 3, H336 |
| propane | (CAS-No.) 74-98-6 | 5.0 - 10.0 | Pyr. Gas Not classified<br>Flam. Gas 1, H220<br>Aquatic Acute Not classified |
| methanol | (CAS-No.) 67-56-1 | 5.0 - 10.0 | Flam. Liq. 2, H225<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 3 (Dermal), H311<br>Acute Tox. 3 (Inhalation), H331<br>STOT SE 1, H370<br>Aquatic Acute Not classified |
| Naphtha (petroleum), hydrodesulfurized heavy / Naphtha (petroleum), hydrodesulfurized heavy | (CAS-No.) 64742-82-1 | 5.0 - 10.0 | Flam. Liq. 2, H225<br>Acute Tox. Not classified (Oral)<br>Muta. 1B, H340<br>Carc. 1B, H350<br>STOT RE 1, H372<br>Asp. Tox. 1, H304 |

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : Irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapour.

### 5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

#### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

| toluene (108-88-3) | |
|---|---|
| **South Africa - Occupational Exposure Limits (Recommended Limits)** | |
| Local name | Toluene |
| OEL TWA (mg/m³) | 188 mg/m³ |
| OEL TWA (ppm) | 50 ppm |
| OEL STEL (mg/m³) | 560 mg/m³ |
| OEL STEL (ppm) | 150 ppm |
| Remark | Sk |
| Regulatory reference | Government Notice. R: 1179 |
| **South Africa - Occupational Exposure Limits (Airborne Pollutants)** | |
| Local name | Toluene |
| OEL TWA (mg/m³) | 188 mg/m³ |
| OEL TWA (ppm) | 50 ppm |

| toluene (108-88-3) | |
|---|---|
| OEL STEL (mg/m³) | 560 mg/m³ |
| OEL STEL (ppm) | 150 ppm |
| Remark | Sk (Danger of cutaneous absorption) |
| Regulatory reference | Government Notice No. R 904 |

| Acetone (67-64-1) | |
|---|---|
| **South Africa - Occupational Exposure Limits (Recommended Limits)** | |
| Local name | Acetone |
| OEL TWA (mg/m³) | 1780 mg/m³ |
| OEL TWA (ppm) | 750 ppm |
| OEL STEL (mg/m³) | 3560 mg/m³ |
| OEL STEL (ppm) | 1500 ppm |
| Regulatory reference | Government Notice. R: 1179 |
| **South Africa - Occupational Exposure Limits (Airborne Pollutants)** | |
| Local name | Acetone |
| OEL TWA (mg/m³) | 1185 mg/m³ |
| OEL TWA (ppm) | 500 ppm |
| OEL STEL (mg/m³) | 2375 mg/m³ |
| OEL STEL (ppm) | 1000 ppm |
| Regulatory reference | Government Notice No. R 904 |

| methanol (67-56-1) | |
|---|---|
| **South Africa - Occupational Exposure Limits (Recommended Limits)** | |
| Local name | Methanol |
| OEL TWA (mg/m³) | 260 mg/m³ |
| OEL TWA (ppm) | 200 ppm |
| OEL STEL (mg/m³) | 310 mg/m³ |
| OEL STEL (ppm) | 250 ppm |
| Remark | Sk |
| Regulatory reference | Government Notice. R: 1179 |
| **South Africa - Occupational Exposure Limits (Airborne Pollutants)** | |
| Local name | Methanol (Methyl alcohol) |
| OEL TWA (mg/m³) | 260 mg/m³ |
| OEL TWA (ppm) | 200 ppm |
| OEL STEL (mg/m³) | 310 mg/m³ |
| OEL STEL (ppm) | 250 ppm |
| Remark | Sk (Danger of cutaneous absorption) |
| Regulatory reference | Government Notice No. R 904 |

| 2-propanol (67-63-0) | |
|---|---|
| **South Africa - Occupational Exposure Limits (Recommended Limits)** | |
| Local name | Propan-2-ol (Isopropyl alcohol) |
| OEL TWA (mg/m³) | 960 mg/m³ Isopropyl alcohol<br>980 mg/m³ Propan-2-ol |
| OEL TWA (ppm) | 400 ppm |
| OEL STEL (mg/m³) | 1225 mg/m³ |
| OEL STEL (ppm) | 500 ppm |
| Remark | Sk |
| Regulatory reference | Government Notice. R: 1179 |
| **South Africa - Occupational Exposure Limits (Airborne Pollutants)** | |
| Local name | Isopropyl alcohol (Propan-2-ol) |
| OEL TWA (mg/m³) | 980 mg/m³ |
| OEL TWA (ppm) | 400 ppm |
| OEL STEL (mg/m³) | 1225 mg/m³ |
| OEL STEL (ppm) | 500 ppm |
| Regulatory reference | Government Notice No. R 904 |

| propane (74-98-6) | |
|---|---|
| **South Africa - Occupational Exposure Limits (Airborne Pollutants)** | |
| Local name | Propane |
| OEL TWA (mg/m³) | 1800 mg/m³ |

| propane (74-98-6) | |
|---|---|
| OEL TWA (ppm) | 1000 ppm |
| Regulatory reference | Government Notice No. R 904 |

| butane, liquefied, under pressure (106-97-8) | |
|---|---|
| **South Africa - Occupational Exposure Limits (Recommended Limits)** | |
| Local name | Butane |
| OEL TWA (mg/m³) | 1430 mg/m³ |
| OEL TWA (ppm) | 600 ppm |
| OEL STEL (mg/m³) | 1780 mg/m³ |
| OEL STEL (ppm) | 750 ppm |
| Regulatory reference | Government Notice. R: 1179 |
| **South Africa - Occupational Exposure Limits (Airborne Pollutants)** | |
| Local name | n-Butane |
| OEL TWA (mg/m³) | 1430 mg/m³ |
| OEL TWA (ppm) | 600 ppm |
| OEL STEL (mg/m³) | 1780 mg/m³ |
| OEL STEL (ppm) | 750 ppm |
| Regulatory reference | Government Notice No. R 904 |

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

Hand protection : Protective gloves

Eye protection : Safety glasses

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

### 8.4. Exposure limit values for the other components

No additional information available

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Liquid.

Colour : Colourless to light yellow.

Odour : No data available

Odour threshold : No data available

pH : No data available

pH solution : No data available

Relative evaporation rate (butylacetate=1) : No data available

Relative evaporation rate (ether=1) : No data available

Melting point : Not applicable

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

Vapour pressure : No data available

Vapour pressure at 50 °C : No data available

Relative vapour density at 20 °C : No data available

Relative density : No data available

Relative density of saturated gas/air mixture : No data available

Density : No data available

Relative gas density : No data available

Solubility : No data available

| | | |
|---|---|---|
| Log Pow | : | No data available |
| Log Kow | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | No data available |
| Explosive properties | : | No data available |
| Oxidising properties | : | No data available |
| Explosive limits | : | No data available |
| Lower explosive limit (LEL) | : | No data available |
| Upper explosive limit (UEL) | : | No data available |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 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 (oral) | : | Not classified |
| Acute toxicity (dermal) | : | May be harmful in contact with skin. |
| Acute toxicity (inhalation) | : | Not classified |

| | |
|---|---|
| ATE ZA (dermal) | 3634.425 mg/kg bodyweight |

| **Naphtha (petroleum), hydrodesulfurized heavy / Naphtha (petroleum), hydrodesulfurized heavy (64742-82-1)** | |
|---|---|
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity) |

| **Acetone (67-64-1)** | |
|---|---|
| LD50 oral rat | 5800 mg/kg bodyweight Animal: rat, Animal sex: female |
| LC50 inhalation rat (mg/l) | 76 mg/l air Animal: rat, Animal sex: female, 95% CL: 65,2 - 88,4 |

| **methanol (67-56-1)** | |
|---|---|
| LD50 oral rat | 1187 - 2769 mg/kg bodyweight Animal: rat |

| **2-propanol (67-63-0)** | |
|---|---|
| LD50 oral rat | 5840 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Experimental value, Oral, 14 day(s)) |
| LD50 dermal rabbit | 16400 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Experimental value, Dermal, 14 day(s)) |
| LC50 inhalation rat (ppm) | > 10000 ppm (Equivalent or similar to OECD 403, 6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s)) |
| LC50 inhalation rat (Vapours - mg/l/4h) | < mg/l/4h |

| **propane (74-98-6)** | |
|---|---|
| LC50 inhalation rat (ppm) | > 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gases)) |

| **butane, liquefied, under pressure (106-97-8)** | |
|---|---|
| LC50 inhalation rat (mg/l) | 1442.738 - 1443 mg/l 15 MIN |
| LC50 inhalation rat (ppm) | 800000 ppm 15 MIN |

| | | |
|---|---|---|
| Skin corrosion/irritation | : | Causes skin irritation. |
| Serious eye damage/irritation | : | Not classified |
| Respiratory or skin sensitisation | : | Not classified |
| Germ cell mutagenicity | : | May cause genetic defects. |

| | | |
|---|---|---|
| Carcinogenicity | : | May cause cancer. |
| Reproductive toxicity | : | Not classified |
| STOT-single exposure | : | Causes damage to organs. May cause drowsiness or dizziness. |
| STOT-repeated exposure | : | Causes damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | : | Not classified |

| Carb Cleaner | |
|---|---|
| Vaporizer | Aerosol |

## SECTION 12: Ecological information

### 12.1. Toxicity

| | | |
|---|---|---|
| Ecology - general | : | Toxic to aquatic life. Harmful to aquatic life with long lasting effects. |
| Hazardous to the aquatic environment, short-term (acute) | : | Toxic to aquatic life. |
| Hazardous to the aquatic environment, long-term (chronic) | : | Harmful to aquatic life with long lasting effects. |

| Acetone (67-64-1) | |
|---|---|
| LOEC (chronic) | > 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | >= 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |

| methanol (67-56-1) | |
|---|---|
| LC50 fish 1 | 15400 mg/l Test organisms (species): Lepomis macrochirus |
| NOEC (chronic) | 208 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |

| 2-propanol (67-63-0) | |
|---|---|
| LC50 fish 1 | 9640 - 10000 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal) |
| Log Pow | 0.05 (Weight of evidence approach, 25 °C) |
| Log Koc | 0.185 - 0.541 (log Koc, SRC PCKOCWIN v2.0, Calculated value) |

| propane (74-98-6) | |
|---|---|
| LC50 fish 1 | 24 mg/l (96 h, Pisces, Literature study) |
| LC50 fish 2 | 49.9 mg/l (96 h, Pisces, Fresh water, QSAR) |
| EC50 Daphnia 1 | 7 mg/l (48 h, Daphnia magna, Literature study) |
| BCF fish 1 | 9 - 25 (Pisces, QSAR) |
| Log Pow | 1.09 - 2.8 (Experimental value, 20 °C) |

| butane, liquefied, under pressure (106-97-8) | |
|---|---|
| LC50 fish 1 | > 1000 mg/l (96 h, Pimephales promelas, QSAR) |
| EC50 72h algae (1) | 5.3 - 5.5 mg/l (Algae, QSAR) |
| Log Pow | 2.89 (Experimental value) |

### 12.2. Persistence and degradability

| Carb Cleaner | |
|---|---|
| Persistence and degradability | No additional information available |

| 2-propanol (67-63-0) | |
|---|---|
| Persistence and degradability | Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water. |
| Biochemical oxygen demand (BOD) | 1.19 g $O_2$/g substance |
| Chemical oxygen demand (COD) | 2.23 g $O_2$/g substance |
| ThOD | 2.4 g $O_2$/g substance |

| propane (74-98-6) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. |

| butane, liquefied, under pressure (106-97-8) | |
|---|---|
| Persistence and degradability | Readily biodegradable in water. |

### 12.3. Bioaccumulative potential

| Carb Cleaner | |
|---|---|
| Bioaccumulative potential | No additional information available |

| 2-propanol (67-63-0) | |
|---|---|
| Log Pow | See section 12.1 on ecotoxicology |
| Log Koc | See section 12.1 on ecotoxicology |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

| propane (74-98-6) | |
|---|---|
| BCF fish 1 | See section 12.1 on ecotoxicology |
| Log Pow | See section 12.1 on ecotoxicology |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

| butane, liquefied, under pressure (106-97-8) | |
|---|---|
| Log Pow | See section 12.1 on ecotoxicology |
| Bioaccumulative potential | Low potential for bioaccumulation (Log Kow < 4). |

### 12.4. Mobility in soil

| Carb Cleaner | |
|---|---|
| Mobility in soil | No additional information available |

| 2-propanol (67-63-0) | |
|---|---|
| Surface tension | 0.021 N/m (25 °C) |
| Log Pow | See section 12.1 on ecotoxicology |
| Log Koc | See section 12.1 on ecotoxicology |
| Ecology - soil | Highly mobile in soil. |

| propane (74-98-6) | |
|---|---|
| Surface tension | 0.016 N/m (-47 °C) |
| Log Pow | See section 12.1 on ecotoxicology |
| Ecology - soil | Not applicable (gas). |

| butane, liquefied, under pressure (106-97-8) | |
|---|---|
| Surface tension | < 0.1 N/m (0 °C) |
| Log Pow | See section 12.1 on ecotoxicology |
| Ecology - soil | Not applicable (gas). |

### 12.5. Other adverse effects

Ozone : Not classified

Other adverse effects : No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Additional information : Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with SANS / IMDG / IATA

| SANS | IMDG | IATA |
|---|---|---|
| **14.1. UN number** | | |
| 1950 | 1950 | 1950 |
| **14.2. Proper Shipping Name** | | |
| AEROSOLS | AEROSOLS | Aerosols, flammable |
| **14.3. Transport hazard class(es)** | | |
| 2.1 | 2.1 | 2.1 |
|  |  |  Not applicable |
| **14.4. Packing group** | | |
| Not applicable | Not applicable | Not applicable |
| **14.5. Environmental hazards** | | |
| Dangerous for the environment : No | Dangerous for the environment : No<br>: | Dangerous for the environment : No |
| No supplementary information available | | |

### 14.6. Special precautions for user

**- SANS**

Special provisions (SANS) : 63, 190

Limited quantities (SANS) : See SP277

| | | |
|---|---|---|
| Limited quantities (SANS) | : | See SP277 |
| Packagings, large packagings and IBCs Packing instructions (SANS) | : | P003 |
| Packagings, large packagings and IBCs Special packing instructions (SANS) | : | PP17, PP87 |

**- IMDG**

| | | |
|---|---|---|
| Special provisions (IMDG) | : | 63, 190, 277, 327, 344, 381, 959 |
| Packing instructions (IMDG) | : | P207, LP200 |
| Special packing provisions (IMDG) | : | PP87, L2 |
| EmS-No. (Fire) | : | F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES |
| EmS-No. (Spillage) | : | S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE) |
| Stowage category (IMDG) | : | None |

**- IATA**

| | | |
|---|---|---|
| PCA Excepted quantities (IATA) | : | E0 |
| PCA Limited quantities (IATA) | : | Y203 |
| PCA limited quantity max net quantity (IATA) | : | 30kgG |
| PCA packing instructions (IATA) | : | 203 |
| PCA max net quantity (IATA) | : | 75kg |
| CAO packing instructions (IATA) | : | 203 |
| CAO max net quantity (IATA) | : | 150kg |
| Special provisions (IATA) | : | A145, A167, A802 |
| ERG code (IATA) | : | 10L |

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health, and environmental national regulations specific for the product

No additional information available

## SECTION 16: Other information

Date of issue : 28/01/2020

Full text of H-statements:

| | |
|---|---|
| H220 | Extremely flammable gas. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H305 | May be harmful if swallowed and enters airways |
| H311 | Toxic in contact with skin. |
| H312 | Harmful in contact with skin. |
| H313 | May be harmful in contact with skin |
| H315 | Causes skin irritation. |
| H331 | Toxic if inhaled. |
| H332 | Harmful if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H340 | May cause genetic defects. |
| H350 | May cause cancer. |
| H370 | Causes damage to organs. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |
| H401 | Toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

SDS South Africa

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*