

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

1.1. Product identifier

| | |
|-------------------------------|---|
| Product form | : Mixture |
| Trade name | : RBS 50 |
| REACH registration exemptions | : Exempted from REACH registration Annex V |
| Product group | : Trade product |

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

1.2.1. Relevant identified uses

| | |
|------------------------------|------------------------------------|
| Main use category | : Professional use, Industrial use |
| Use of the substance/mixture | : Detergent |

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

CHEMICAL PRODUCTS R. BORGHGRAEF S.A.
Rue Bollinckx 271-273
1190 Bruxelles
Belgique
T +32 2 332 15 66 - F + 32 2 332 0805
msds@rbs-cp.be - www.rbs-cp.be

Antipoison Center

Belgisch Antigif Centrum / Centre Antipoison Belge
T + 32 (0)70 245 245

1.4. Emergency telephone number

Emergency number : +32 2 332 15 66

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 1, Sub-Category 1B H314
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

| | |
|--------------------------------|--|
| Signal word (CLP) | : Danger |
| Contains | : Sodium hypochlorite solution; Sodium hydroxide |
| Hazard statements (CLP) | : H314 - Causes severe skin burns and eye damage. |
| Precautionary statements (CLP) | : P280 - Wear protective gloves / protective clothing / eye protection / face protection. P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated |

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clothing. Rinse skin with water/shower.

P309+P311 - IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|------------------------------|---|-------|--|
| Tetrapotassium pyrophosphate | CAS-No.: 7320-34-5 EC-No.: 230-785-7 REACH-no: 01-2119489369-18 | < 30 | Eye Irrit. 2, H319 |
| Sodium hypochlorite solution | CAS-No.: 7681-52-9 EC-No.: 231-668-3 EC Index-No.: 017-011-00-1 REACH-no: 01-2119488154-34 | 1 – 5 | Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411 |
| Sodium hydroxide | CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27 | 1 – 5 | Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 |

Specific concentration limits:

| Name | Product identifier | Specific concentration limits (%) |
|------------------------------|---|---|
| Sodium hypochlorite solution | CAS-No.: 7681-52-9 EC-No.: 231-668-3 EC Index-No.: 017-011-00-1 REACH-no: 01-2119488154-34 | (5 \leq C < 100) EUH031 |
| Sodium hydroxide | CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6 REACH-no: 01-2119457892-27 | (0,5 \leq C < 2) Eye Irrit. 2, H319 (0,5 \leq C < 2) Skin Irrit. 2, H315 (2 \leq C < 5) Skin Corr. 1B, H314 (5 \leq C < 100) Skin Corr. 1A, H314 |

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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| | |
|---------------------------------------|---|
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
| First-aid measures after skin contact | : Take off immediately all contaminated clothing. Rinse skin with water/shower. If irritation develops. Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist if irritation persists. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. |

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

Symptoms/effects : Causes severe skin burns and eye damage.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : All extinguishing media can be used.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : 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

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures : Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

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7.2. Conditions for safe storage, including any incompatibilities

| | |
|------------------------|--|
| Technical measures | : Comply with applicable regulations. |
| Storage conditions | : Keep only in the original container in a cool, well ventilated place. . Keep container closed when not in use. |
| Incompatible products | : Acids. |
| Incompatible materials | : Sensitive metals. |
| Storage temperature | : 5 – 25 °C The product may be stored at a minimum temperature of 3°C or a maximum temperature of 50°C for a continuous period of 200 days without alteration. |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| Sodium hydroxide (1310-73-2) | |
|--|---------------------|
| Belgium - Occupational Exposure Limits | |
| OEL TWA | 2 mg/m ³ |
| Remark | M |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or face shield

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

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Hand protection:

Wear protective gloves.

| Hand protection | | | | | |
|-------------------|----------------------|-------------------|----------------|-------------|----------|
| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
| Disposable gloves | Nitrile rubber (NBR) | 6 (> 480 minutes) | ≥ 0.11 mm | | |

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask. if handling airborne particles generates (in case of vapor / spray).

| Respiratory protection | | | |
|------------------------|-------------|-----------|----------|
| Device | Filter type | Condition | Standard |
| Disposable half mask | Type P2 | | |

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|------------------------------------|
| Physical state | : Liquid |
| Colour | : light yellow. |
| Appearance | : Colorless to pale yellow liquid. |
| Odour | : Lightly chlorinated. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not available |
| Boiling point | : Not available |
| Flammability | : Non flammable. |
| Lower explosion limit | : Not available |
| Upper explosion limit | : Not available |
| Flash point | : Not available |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| pH | : 13,8 |
| Viscosity, kinematic | : Not available |
| Viscosity, dynamic | : 2,3 mPa.s |
| Solubility | : Totally in the water. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not available |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : 1,24 |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Reacts with : Acids.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

According to process conditions, hazardous decomposition products may be generated.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

| RBS 50 | |
|---------------|--------------|
| LD50 oral rat | > 2000 mg/kg |

| Sodium hypochlorite solution (7681-52-9) | |
|--|--------------|
| LD50 oral rat | > 1100 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |
| LC50 Inhalation - Rat | > 10500 mg/l |

| Sodium hydroxide (1310-73-2) | |
|------------------------------|--------------------|
| LD50 oral | > 500 mg/kg Rabbit |

| Tetrapotassium pyrophosphate (7320-34-5) | |
|--|--------------|
| LD50 oral rat | > 2000 mg/kg |
| LD50 dermal rat | > 7940 mg/kg |

Skin corrosion/irritation : Causes severe skin burns.
pH: 13,8

| Sodium hypochlorite solution (7681-52-9) | |
|--|------|
| pH | > 11 |

Serious eye damage/irritation : Assumed to cause serious eye damage
pH: 13,8

| Sodium hypochlorite solution (7681-52-9) | |
|--|------|
| pH | > 11 |

Respiratory or skin sensitisation : Not classified
Additional information : Based on available data, the classification criteria are not met

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| | |
|------------------------|--|
| Germ cell mutagenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Carcinogenicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Reproductive toxicity | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-single exposure | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| STOT-repeated exposure | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |
| Aspiration hazard | : Not classified |
| Additional information | : Based on available data, the classification criteria are not met |

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

| | |
|---|--|
| Potential adverse human health effects and symptoms | : Based on available data, the classification criteria are not met |
|---|--|

SECTION 12: Ecological information

12.1. Toxicity

| | |
|---|------------------|
| Hazardous to the aquatic environment, short-term (acute) | : Not classified |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified |

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| | |
|----------------------|------------|
| LC50 - Fish [1] | > 100 mg/l |
| EC50 - Crustacea [1] | > 30 mg/l |

Sodium hypochlorite solution (7681-52-9)

| | |
|----------------------|-------------|
| LC50 - Fish [1] | 0,06 mg/l |
| EC50 - Crustacea [1] | 0,141 mg/l |
| EC50 72h - Algae [1] | 0,04 mg/l |
| NOEC chronic fish | > 0,04 mg/l |

Sodium hydroxide (1310-73-2)

| | |
|----------------------|--------------------|
| LC50 - Fish [1] | 33 (33 – 189) mg/l |
| EC50 - Crustacea [1] | 40 (40 – 240) mg/l |

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Tetrapotassium pyrophosphate (7320-34-5)

| | |
|----------------------|------------|
| LC50 - Fish [1] | > 100 mg/l |
| EC50 - Crustacea [1] | > 100 mg/l |

12.2. Persistence and degradability

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| | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |
|-------------------------------|------------------|

12.3. Bioaccumulative potential

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| | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |
|---------------------------|------------------|

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

14.1. UN number or ID number

UN-No. (ADR) : UN 1824
UN-No. (IMDG) : UN 1824
UN-No. (IATA) : UN 1824
UN-No. (ADN) : UN 1824
UN-No. (RID) : UN 1824

14.2. UN proper shipping name

Proper Shipping Name (ADR) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IMDG) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (IATA) : Sodium hydroxide solution
Proper Shipping Name (ADN) : SODIUM HYDROXIDE SOLUTION
Proper Shipping Name (RID) : SODIUM HYDROXIDE SOLUTION
Transport document description (ADR) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II, (E)
Transport document description (IMDG) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II
Transport document description (IATA) : UN 1824 Sodium hydroxide solution, 8, II
Transport document description (ADN) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II
Transport document description (RID) : UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

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14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : 8
Danger labels (ADR) : 8



IMDG

Transport hazard class(es) (IMDG) : 8
Danger labels (IMDG) : 8



IATA

Transport hazard class(es) (IATA) : 8
Danger labels (IATA) : 8



ADN

Transport hazard class(es) (ADN) : 8
Danger labels (ADN) : 8



RID

Transport hazard class(es) (RID) : 8
Danger labels (RID) : 8



14.4. Packing group

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

Overland transport

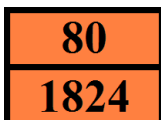
Classification code (ADR) : C5
Limited quantities (ADR) : 11

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Excepted quantities (ADR) : E2
Packing instructions (ADR) : P001, IBC02
Mixed packing provisions (ADR) : MP15
Portable tank and bulk container instructions (ADR) : T7
Portable tank and bulk container special provisions (ADR) : TP2
Tank code (ADR) : L4BN
Vehicle for tank carriage : AT
Transport category (ADR) : 2
Hazard identification number (Kemler No.) : 80
Orange plates :



Tunnel restriction code (ADR) : E

Transport by sea

Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T7
Tank special provisions (IMDG) : TP2
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A
Segregation (IMDG) : SG35
Properties and observations (IMDG) : Colourless liquid. Colourless liquid. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.

Air transport

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y840
PCA limited quantity max net quantity (IATA) : 0.5L
PCA packing instructions (IATA) : 851
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 855
CAO max net quantity (IATA) : 30L
Special provisions (IATA) : A3
ERG code (IATA) : 8L

Inland waterway transport

Classification code (ADN) : C5
Limited quantities (ADN) : 1 L
Excepted quantities (ADN) : E2
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

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Rail transport

| | |
|---|---------------|
| Classification code (RID) | : C5 |
| Limited quantities (RID) | : 1L |
| Excepted quantities (RID) | : E2 |
| Packing instructions (RID) | : P001, IBC02 |
| Mixed packing provisions (RID) | : MP15 |
| Portable tank and bulk container instructions (RID) | : T7 |
| Portable tank and bulk container special provisions (RID) | : TP2 |
| Tank codes for RID tanks (RID) | : L4BN |
| Transport category (RID) | : 2 |
| Colis express (express parcels) (RID) | : CE6 |
| Hazard identification number (RID) | : 80 |

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| | |
|-------------------|---|
| Data sources | : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. |
| Other information | : None. |

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| Full text of H- and EUH-statements: | |
|-------------------------------------|---|
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment – Chronic Hazard, Category 2 |
| EUH031 | Contact with acids liberates toxic gas. |
| Eye Dam. 1 | Serious eye damage/eye irritation, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| H290 | May be corrosive to metals. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |
| Met. Corr. 1 | Corrosive to metals, Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation, Category 1, Sub-Category 1A |
| Skin Corr. 1B | Skin corrosion/irritation, Category 1, Sub-Category 1B |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |

Safety Data Sheet (SDS), EU

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.