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

| 1.1 Product identifier | | | |
|---|--|--|--|
| Substance name: | e: Disodium carbonate, compound with hydrogen peroxide (2:3) | | |
| REACH Reg. No.: The substance has been pre-registered. The transition time according t REACH Regulation, Article 23 is still not expired. | | | |
| Index No.: | Not available. | | |
| CAS No.: | 15630-89-4 | | |
| EC No.: | 239-707-6 | | |
| 1.2 Relevant identified us | ses of the substance or mixture and uses advised against | | |
| Identified uses: | Sodium Percarbonate dissolves into water rapidly to release oxygen and provides powerful cleaning, bleaching, stain removal and deodorizing capabilities. As a kind of new high effective bleaching raw material for detergent, Sodium Percarbonate also is one disinfecting agent. | | |

Uses advised against: Not available.

Section 2: Hazards identification

| 2 | .1 Classification of the subst | ance or mixture |
|---|--------------------------------|---------------------------------|
| | Classification according to F | egulation (EC) No 1272/2008[CLP |
| | Acute toxicity Category 4 | H302 |
| | Eye Damage Category 1 | H318 |
| | Oxidising solids Category 2 | H272 |
| | Classification according to C | ouncil Directive 67/548/EEC |
| | Xn: R22 | |
| | Xi: R41 | |

-- Page 1 / 10 -

O: R8

Additional information

Full text of R-phrase(s) and H-statement(s): see section 16.

2.2 Label elements

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

Product identifier: Disodium carbonate, compound with hydrogen peroxide (2:3)

Hazard pictogram(s):

| | GHS03 | GHS05 | GHS08 | | |
|--------------------|---------------------------------|--------------------|--------|--|--|
| | Danger | | | | |
| Signal word: | H302 Harmful if swallowed. | | | | |
| | H318 Causes serious eye damage. | | | | |
| Hazard statements: | H272 May inten | sify fire; oxidize | - - | | |

Precautionary statements:

Prevention P210 Keep away from heat.

- P221 Take any precaution to avoid mixing with combustibles. P280 Wear protective gloves / protective clothing / eye protection / face protection.
 Response: P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON Center or doctor/physician.
- **Disposal:** P501 Dispose of contents/container in accordance with local / regional / national / international regulations.

Supplemental Hazard information (EU):

No information available.

2.3 Other hazards

No information available.

Section 3: Composition/information on ingredients

3.1 Substance information

| Substance name | Synony m | CAS No. | EC No. | Classification to Regulatio 1272/2008 | n according n (EC) No | Classification according to 67/548/EC | % (w/ w) |
|---|----------------------------|------------|------------|---|--------------------------|---|----------------|
| Disodium carbonate, compound with hydrogen peroxide (2:3) | Sodium percarb onate | 15630-89-4 | 239-707-6 | Acute Tox. 4 Eye Dam. 1 Ox. Sol. 2 | H302 H318 H272 | Xn: R22 Xi: R41 O: R8 | 88 |
| Specific concentr | ation limits | s: C ≥ 2 | 5 %, H302, | H318; 10 | ≤C < 25 | %, H319 | |
| Sodium carbonate | Soda Ash | 497-19-8 | 207-838-8 | Eye Irrit. 2 | H319 | Xi; R36 | 8.67 |

-- Page 2 / 10

| Sodium | Table | 7647-14-5 | 231-598-3 | No classification | 2 10 |
|----------|-------|-----------|-----------|--------------------|------|
| chloride | salt | | 201 070 0 | NO Classification. | 2.17 |

Remark: The rest unspecified ingredients are impurities, and they are not hazard.

Section 4: First aid measures

4.1 Description of first aid measures

General notes: In all cases of doubt, or when symptoms persist, seek medical attention.

Following inhalation:

Remove the subject from dusty environment.

Consult with a physician in case of respiratory symptoms.

Following skin contact:

Remove contaminated shoes, socks and clothing; wash the affected skin with running water.

Clean clothing. Consult a physician in case of persistent pain or redness.

Following eye contact:

Flush eyes with running water for 15 minutes, while keeping the eyelids wide open.

Consult with an ophthalmologist in all cases.

Following ingestion:

If the subject is completely conscious, rinse mouth and administer fresh water. Don't induce vomiting. If the subject is unconscious, loosen collar and tight clothing, lay the victim on his/her left side, and give nothing by mouth. Keep warm with blanket. Don't induce vomiting.

Notes for the doctor:

Treat symptomatically and supportively.

Treatment may vary with condition of victim and specifics of incident.

4.2 Most important symptoms and effects, both acute and delayed

Potential health effects:

General: Irritating to mucous membrane, eyes and skin.

Inhalation: Slight nose and throat irritation. At high concentrations, cough.

In case of repeated or prolonged exposure: risk of sore throat, nose bleeds, chronic bronchitis. Eye

contact: Severe eye irritation, watering and redness, can cause burns to the eye.

Risk of serious or permanent eye lesions. In case of repeated contact: risk of dermatitis.

Ingestion: Severe irritation of the mouth, throat, esophagus and stomach.

Bloating of stomach, belching. Nausea, vomiting and diarrhea.

4.3 Indication of the immediate medical attention and special treatment needed

Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material.

Attending physician should treat exposed patients symptomatically.

-- Page 3 / 10 --

Section 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Oxidising material. Contact with combustible materials my cause fire. It may decompose explosively when heated or involved in a fire. May explode from heat or contamination. Containers may explode when heated. Runoff may create fire or explosion hazard. Can be released in case of fire: Carbon monoxide and carbon dioxide, Sodium oxide.

5.3 Advice for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary. Use water spray to cool unopened containers.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

6.3 Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

Section 7: Handling and storage

7.1 Precautions for safe handling

Do not leave container open. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition -No smoking. Keep away from combustible material.

-- Page 4 / 10 --

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat sources. Keep away from reactive products.

7.3 Specific end use(s)

Not available.

Section 8 : Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values: CAS # 15630-89-4: MAK (DE): 6 mg/m³; MAC (NL): 10 mg/m³

8.2 Exposure controls

Appropriate engineering controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal protective equipment:

| Eye and face protection: | Dust proof chemical goggles. | |
|--------------------------|---|--|
| Skin protection: | Protective gloves-chemical resistant. Recommended material: PVC, neoprene or rubber. | |
| | For brief contact, few precautions other than clean body- covering clothing | |
| | should be needed. When prolonged or frequently repeated contact could occur, use protective, full body clothing, such as PVC or rubber, impervious to this material. | |
| Respiratory protection: | Where risk assessment shows air-purifying respirators are appropriate use type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. | |
| Thermal hazards: | Not available. | |

Environmental exposure controls:

Prevent from entering sewers, basements and workpants, or any place where its accumulation can be dangerous.

Consumer exposure controls:

Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of workday.

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

-- Page 5 / 10 --

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| , , , , | |
|---|---|
| Appearance: | Granular solid |
| Colour: | White or colour |
| Odour: | Odourless |
| pH: | 3% solution: 10 -11 |
| Melting point: | Not applicable. Decomposes when heated |
| Boiling point: | Not applicable. Decomposes when heated. |
| Density: | 0.80-1.0 g/cm ³ |
| Vapour pressure: | < 10 ⁻³ Pa at 25°C |
| Partition coefficient (n -octanol/water): | Not applicable. Sodium percarbonate is a simple inorganic |
| | salt. |
| Solubility(ies): | 140 g/l at 24 °C (75 °F) |
| Flammability: | Non-flammable. |
| Decomposition temperature: | >50 °C |
| Explosive properties: | No data available. |
| Oxidising properties: | No data available. |

9.2 Other information

No data available.

Section 10: Stability and reactivity

10.1 Reactivity

Oxidising agents, actual reactivity varies greatly with the identity of the organic compound.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

The substance can react dangerously with reducing agents, flammable substances.

10.4 Conditions to avoid

Avoid moisture. Avoid temperatures above 60 °C, direct sunlight and contact with sources of heat.

10.5 Incompatible materials

Water, Acids, Bases, Salts of heavy metals, Reducing agents, Organic materials, Flammable substances.

10.6 Hazardous decomposition products

Can be released in case of fire: Carbon monoxide and carbon dioxide, Sodium oxide.

-- Page 6 / 10 --

Section 11: Toxicological information

11.1 *Toxicokinetics, metabolism and distribution* Not available.

| 11.2 Information on toxicologi | cal effects |
|---------------------------------|---|
| Acute toxicity: | |
| CAS # 15630-89-4: | |
| Acute Oral toxicity: | $LD_{50} = 1034 \text{ mg/kg} \text{ (rat) (OECD SIDS);}$ |
| Acute Inhalation toxicity: | $LC_0 > 4.58 \text{ mg/l/4h}$ (rat) (OECD SIDS); |
| Acute Dermal toxicity: | $LDL_0 > 2000 \text{ mg/kg}$ (rabbit) (OECD SIDS). |
| Skin corrosion/irritation: | |
| CAS # 15630-89-4: a slight irri | tating effect on the skin In animal tests. (OECD SIDS) |
| Serious eye damage/irritatio | n: |
| CAS # 15630-89-4: highly irrita | ating to the rabbit eye. (OECD SIDS) |
| Respiratory or skin sensitizat | tion: |
| CAS # 15630-89-4: do not have | e sensitizing properties in a test with guinea pigs. (OECD SIDS) |
| CMR effects (Carcinogenicity | , Mutagenicity and Toxicity for Reproduction): |
| No component of this produ- | ct presents at levels greater than or equal to 0.1% is identified as probable |
| possible or confirmed human | carcinogen by IARC. |
| STOT-single exposure and re | peated exposure: |
| No data available. | |
| Additional information: | |
| RTECS: FG0750000 | |
| Section 12: Ecological infor | mation |
| | |

12.1 Toxicity

| CAS # 15630-89-4: | |
|--------------------------|---|
| Acute fish toxicity: | LC ₅₀ = 70.7 mg/l/96h (Pimephales promelas) (OECD SIDS); |
| Acute daphnia toxicity: | EC ₅₀ = 4.9 mg/l/48h (<i>Daphnia pulex</i>) (OECD SIDS); |
| Acute bacteria toxicity: | No data available. |

12.2 Persistence and degradability

Sodium percarbonate dissociates in water into hydrogen peroxide and sodium carbonate. Hydrogen peroxide is rapidly degraded in a biological waste water treatment plant. (OECD SIDS)

12.3 Bioaccumulative potential

Both sodium carbonate and hydrogen peroxide (log Kow < -1) are inorganic chemicals which do not bioaccumulate. (OECD SIDS)

-- Page 7 / 10 --

12.4 Mobility in soil

Volatilisation of hydrogen peroxide from surface waters and moist soil is expected to be very low, while it is expected to be highly mobile in soil. (OECD SIDS)

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available. Section 13: Disposal considerations

13.1 Waste treatment methods

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Section 14: Transport information

14.1 Land transport (ADR/RID/GGVSE)

| UN-No.: | 3378 |
|---------------------------------|--------------------------------|
| Official transport designation: | SODIUM CARBONATE PEROXYHYDRATE |
| Class: | 5.1 |
| Classification Code: | O2 |
| Packing group: | II |
| Hazard label: | 5.1 |

14.2 Sea transport (IMDG-Code/GGVSee)

| Proper Shipping Name: | SODIUM CARBONATE PEROXYHYDRATE |
|-----------------------|--------------------------------|
| Class: | 5.1 |
| UN-No.: | 3378 |
| Packing group: | II |
| EmS No.: | F-A, S-Q |
| Marine pollutant: | No |
| | |

14.3 Air transport (ICAO-TI/IATA-DGR)

| SODIUM CARBONATE PEROXYHYDRATE |
|--------------------------------|
| 5.1 |
| 3378 |
| II |
| |

-- Page 8 / 10 --

14.4 Additional informationNo data available.Section 15: Regulatory information

| 15.1 Safety, | health and environmenta | l regulations/legislation | specific for the | e substance or mi | xture |
|--------------|-------------------------|---------------------------|------------------|-------------------|-------|
| Ell rogulat | ion: | | | | |

| Ell rogulation. | | |
|----------------------------|---|--|
| Authorisations: | No information available | |
| Restrictions on use | No information available | |
| | All the ingredients of the product are listed in the inventory | |
| | At the ingredients of the product are used in the inventory. CAS = 407.10.8 is listed in the Appendix L CAS = 15620.80.4.8 CAS = | |
| D3D (877548/EEC). | CAS # 497-19-8 is listed in the Annex 1. CAS # 15050-69-4 & CAS # | |
| | 7647-14-5 are not listed. | |
| Other chemical regulation: | | |
| USA - TSCA: | All the ingredients of the product are listed in the inventory. | |
| Canada - DSL: | All the ingredients of the product are listed in the inventory. | |
| Australia - AICS: | All the ingredients of the product are listed in the inventory. | |
| Korea - ECL: | All the ingredients of the product are listed in the inventory. | |
| Japan - ENCS: | All the ingredients of the product are listed in the inventory. | |
| China - IECSC: | All the ingredients of the product are listed in the inventory. | |

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

Section 16: Other information

16.1 Revision Information:

Date of the previous revision: Not applicable. Date of this revision: 26/10/2010 Revision summary: New SDS

16.2 Abbreviations and acronyms

- **CLP:** EU regulation (EC) No 1272/2008 on classification, labelling and packaging of chemical substances and mixtures.
- Globally Harmonized System of Classification and Labelling of Chemicals.
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- IARC: International Agency for Research on Cancer.
- **RID:** European Rail Transport.
- IMDG: International Maritime Code for Dangerous Goods.
- IATA: International Air Transport Association.
- **OSHA:** The United States Occupational Safety and Health Administration.

-- Page 9 / 10 -

- **TSCA:** Toxic Substances Control Act, The American chemical inventory.
- DSD: Dangerous Substance Directive (67/548/EEC).
- DSL: Domestic Substances List, The Canadian chemical inventory.
- AICS: The Australian Inventory of Chemical Substances.
- ECL: Existing Chemicals List, the Korean chemical inventory.
- **ENCS:** Japanese Existing and New Chemical Substances.
- IECSC: Inventory of existing chemical substances in China.

16.3 Key literature references and sources for data

IUCLID Dataset.

HSDB - Hazardous Substances Data Bank

OECD SIDS Initial Assessment Report

16.4 Relevant R-phrases and H-statements

R-phrases (code and full text):

R8 Contact with combustible material may cause fire.

- R22 Harmful if swallowed.
- R36 Irritating to eyes.

R41 Risk of serious damage to eyes.

H-statements (code and full text):

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H272 May intensify fire; oxidizer.

16.5 Training advice

No data available.

16.6 Declare to reader

The information in this Safety Data Sheet (SDS) was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable. According to REACH Article 31(5), the SDS shall be supplied in an official language of the Member State(s) where the substance or mixture is placed on the market, unless the recipient Member State(s) concerned provide otherwise. It should also be noted that this SDS is applicable to the countries with English as an official language.

------ End of the SDS -------- Page 10 / 10 --