

SODIUM HYPOCHLORITE 5<20%**Code : 16188****SECTION 1. Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Chemical description : Sodium hypochlorite , Chlorine bleache lye , Javel water , solution (5<20% Cl active).

Type of product : Pure product in solution .

Reach registration number : 01-2119488154-34

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

Identified use(s) : See table on the front page of the annex.

Use(s) advised against : This product is not recommended for any industrial, professional or consumer use other than identified in table on the front page of the annex.
Not for use in ornamental articles, in tricks and jokes and in games (in accordance with Annex XVII to Regulation (EC) No 1907/2006) (3. Liquid substances or mixtures, which are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F, (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10, (c) hazard class 4.1, (d) hazard class 5.1).

1.3. Details of the supplier of the safety data sheet

Company identification : BRENNTAG N.V. - Nijverheidslaan 38 - BE-8540 DEERLIJK
TEL: +32(0)56/77.69.44 - FAX: +32(0)56/77/57/11
E-MAIL: info@brenntag.be - Website: www.brenntag.be

BRENNTAG Nederland B.V. - Donker Duyvisweg 44 - NL-3316 BM DORDRECHT
TEL: +31(0)78/65.44.944 - FAX: +31(0)78/65.44.919
E-MAIL: info@brenntag.nl - Website: www.brenntag.nl

1.4. Emergency telephone number

Emergency phone number : Belgium : Antipoison Center - Brussels
TEL: +32(0)70/245.245

The Netherlands : National Poisoning Information Center - Bilthoven
TEL: +31(0)30/274.88.88 (Only for the purpose of informing medical personnel in cases of acute intoxications)

SECTION 2. Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Corrosive to metals - Category 1 - Warning (Met. Corr. 1; H290)
Skin corrosion - Category 1B - Danger (Skin Corr. 1B; H314)
Serious eye damage - Category 1 - Danger (Eye Dam. 1; H318)
Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (Aquatic Acute 1; H400)
Hazardous to the aquatic environment - Chronic hazard - Category 2 (Aquatic Chronic 2; H411)

2.2. Label elements**Label in accordance with Regulation (EC) No 1272/2008**

• Dangerous ingredient(s) : Sodium hypochlorite, solution ...% Cl active

• Hazard pictogram(s)



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SECTION 2. Hazards identification (continued)

- Signal word : Danger
- Hazard statements : H290 - May be corrosive to metals. H314 - Causes severe skin burns and eye damage. H410 - Very toxic to aquatic life with long lasting effects. EUH031 - Contact with acids liberates toxic gas.
- Precautionary statements
 - Prevention : P260 - Do not breathe fume/gas/mist/vapours/spray. P273 - Avoid release to the environment. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 - * - Response : P303+P361+P353+P310 - IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER/doctor/... P305+P351+P338+P310 - IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. P390 - Absorb spillage to prevent material damage.

2.3. Other hazards

- Physical/chemical hazards : The substance decomposes by heating and under influence of sunlight in formation of toxic and corrosive vapours and in formation of oxygen that promotes fire.
- Hazards for the health : A health dangerous concentration in the air will rather slowly be reached by evaporation of this substance at app. 20°C; by spraying much faster.
- Hazards for the environment : Product causes a strong rise of the pH-value of water and soil. This product is no substance or contains no PBT or vPvB (in accordance with Annex XIII).
- Hazards for the safety : Incombustible product, but stimulates fire of other materials.

SECTION 3. Composition/information on ingredients

3.1. Substances

Name component(s)	Weight %	CAS nr	EINECS nr	Index nr	Reach nr	CLASSIFICATION
Sodium hypochlorite, solution : 5 < 20 % Cl act. ...% Cl active		7681-52-9	231-668-3	017-011-00-1	01-2119488154-34	Met. Corr. 1; H290 Skin Corr. 1B; H314 STOT SE 3; H335 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH031
Sodium carbonate anhydrous :	1 < 3 %	497-19-8	207-838-8	011-005-00-2	01-2119485498-19	Eye Irrit. 2; H319
Sodium hydroxide :	0.5 < 1 %	1310-73-2	215-185-5	011-002-00-6	01-2119457892-27	Met. Corr. 1; H290 Skin Corr. 1A; H314

Sodium hypochlorite :
 Note B (Regulation (EC) No 1272/2008) applies to the product or one or more of its components.
 Note: M-factor=10 (Acute); Note: M-factor=1 (Chronic)
 Note: SCL applicable

Sodium hydroxide :
 Note: SCL applicable

The full text of the (EU)H-statements is in section 16.

SODIUM HYPOCHLORITE 5<20%**Code : 16188****SECTION 4. First aid measures****4.1. Description of first aid measures**

- General : CALL A PHYSICIAN IN ALL CIRCUMSTANCES.
Never give anything by mouth to an unconscious person.
- First Aid Measures
- Inhalation : Remove victim into fresh air.
Allow the affected person to rest in semi-sitting position.
If not breathing, give artificial respiration.
Seek medical attention IMMEDIATELY.
 - Skin Contact : Remove contaminated clothing and shoes while rinsing.
Rinse skin immediately with plenty of water. (shower if necessary).
Immediately call a POISON CENTER or doctor/physician.
 - Eye Contact : Rinse immediately thoroughly and long (at least 15 min.) with plenty of water.
Remove contact lenses.
Keep rinsing or dripping the eye during transport.
Immediately call a POISON CENTER or doctor/physician.
 - Ingestion : DO NOT INDUCE VOMITING. Rinse mouth with water.
Immediately call a POISON CENTER or doctor/physician.

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

See section 11.

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

For specialist advice doctors should contact the NVIC or the Belgian Poison center.

SECTION 5. Firefighting measures**5.1. Extinguishing media**

Extinguishing Media

- Suitable : In case of nearby fire, use preferably water spray.
- Unsuitable : Not known .

5.2. Special hazards arising from the substance or mixture

Special Exposure Hazards : Contact with acids liberates toxic gas. (E.g. Chlorine gas)

5.3. Advice for firefighters

- Special Protective Equipment for Firefighters : Use self-contained breathing apparatus and wear protective clothes when in close proximity to fire.
- Special Procedures : Apply water spray or fog to cool nearby equipment. Avoid fire-fighting water to enter environment.

SECTION 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

- Personal Precautions : Evacuate all personnel immediately and ventilate area.
Avoid breathing vapour and contact with skin, eyes and clothing. Wear recommended personal protective equipment. (See section 8)

6.2. Environmental precautions

- Environmental Precautions : Shut off leaks if without risks.
Dike in the spilled product as much as possible with inert material.
Prevent entry of product in public water, sewers or soil.
Notify authorities if product enters sewers or public waters.

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SECTION 6. Accidental release measures (continued)

6.3. Methods and material for containment and cleaning up

Methods for Cleaning Up : Collect the spillage in closable, corrosion resistant, suitable disposal containers. Clean up any spills as soon as possible, using an inert absorbent material. Residue is to be washed down with plenty of water.

6.4. Reference to other sections

For personal protection, see section 8.
For the removal of the waste product, see section 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Handling : AVOID FOG TRANSFORMATION ! STRONG HYGIENE !
Avoid breathing vapour and contact with skin, eyes and clothing. Wear recommended personal protective equipment. (See section 8)
Avoid splashing and formation of vapour when emptying or diluting the product.
When diluting: add the basic solution in water, never the other way around.
When using, do not eat, drink or smoke.
Emergency eye wash fountains and showers should be available in the immediate vicinity of any potential exposure.

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep only in the original, safely locked container in a well ventilated, cool and dark place.
All dangerous products should be placed on a drip tray or should be barreled.
Keep away from : Combustibles , Reducing materials , Acids .

Packaging Material : PVC , Polyethylene , Polyester , Steel covered with Ebonite .

Insuitable Packaging Material : Metals .

7.3. Specific end use(s)

For identified uses, see subsection 1.2 and/or exposure scenarios.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits : Sodium hypochlorite, solution ...% Cl active : Short time value (BE) : 0,5 ppm (1,5 mg/m³) (2014) (Chlorine)
Sodium hydroxide : Limit value (BE) : 2 mg/m³ (2014) (M)
(M) The mention "M" means that the exposition above the limit value causes irritation or that there is a danger for acute poisoning. The work procedure has to be designed somehow or other that the exposition doesn't exceed the limit value. During a control, the sample period should be so short as possible to carry out a reliable measurement. The mesure result is then related to the considered period.

Biological limit values : They will be included when available.

DNELs : • Sodium hypochlorite, solution ...% Cl active : Worker, acute - local effects, inhalation : 3,1 mg/m³
• Sodium hypochlorite, solution ...% Cl active : Worker, acute - systemic effects, inhalation : 3,1 mg/m³
• Sodium hypochlorite, solution ...% Cl active : Worker, long-term - local effects, inhalation : 1,55 mg/m³
• Sodium hypochlorite, solution ...% Cl active : Worker, long-term - systemic effects, inhalation : 1,55 mg/m³
• Sodium hypochlorite, solution ...% Cl active : Consumer, long-term - local effects, inhalation : 1,55 mg/m³
• Sodium hypochlorite, solution ...% Cl active : Consumer, long-term - systemic

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SECTION 8. Exposure controls/personal protection (continued)

- PNECs
- effects, inhalation : 1,55 mg/m³
 - Sodium hypochlorite, solution ...% Cl active : Consumer, long-term - systemic effects, oral : 0,26 mg/kg
 - Sodium carbonate anhydrous : Worker, long-term - local effects, inhalation : 10 mg/m³
 - Sodium carbonate anhydrous : Consumer, acute - local effects, inhalation : 10 mg/m³
 - Sodium hydroxide : Worker, long-term - local effects, inhalation : 1,0 mg/m²
 - Sodium hydroxide : Consumer, long-term - local effects, inhalation : 1,0 mg/m³
 - Sodium hypochlorite, solution ...% Cl active : Fresh water : 0,21 mg/l
 - Sodium hypochlorite, solution ...% Cl active : Marine water : 0,042 mg/l
 - Sodium hypochlorite, solution ...% Cl active : Fresh water sediment : Not expected
 - Sodium hypochlorite, solution ...% Cl active : Marine water sediment : Not expected
 - Sodium hypochlorite, solution ...% Cl active : Soil : Not expected
 - Sodium hypochlorite, solution ...% Cl active : Sewage treatment plant : 0,03 mg/l
 - Sodium carbonate anhydrous : Not applicable
 - Sodium hydroxide : Not applicable

8.2. Exposure controls

- Engineering Measures : Ventilation , Local exhaust (If possible through the floor).
- Personal Protection Equipment
- Respiratory protection : CE-approved mask for inorganic vapours (type B, grey).
- * - Skin protection : Chemical resistant clothing and boots (EN 14605) .
- Hand protection : Suitable material for safety gloves (EN 374):
The suitability of the gloves and the breakthrough time for a specific workplace should be discussed with the producers of the protective gloves.
- material : Nitril rubber
- thickness : 0,5 mm
- penetration time : > 8 h
- Eye/Face protection : Closed safety glasses or face shield.
- Environmental exposure controls : See sections 6, 7, 12 and 13.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

- See technical data sheet for detailed information.
- Physical State (20°C) : Liquid .
 - Form/Colour : Clear , Yellow-green.
 - Odour : Weak chlorine odour. .
 - Odour threshold : No data available.
 - pH value : > 12,5 .
 - * Melting/Freezing point : -20 °C (solution 12% Cl active)
 - Boiling Point/Range (1013 hPa) : Not applicable. (Decomposes)
 - Flash point : Not applicable.
 - Fire hazard : Not applicable.
 - Evaporation rate : No data available.
 - Explosion limits in air : Not applicable.
 - Vapour pressure (20°C) : 2,5 kPa
 - Relative vapour density (air=1) : No data available.

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Relative density of saturated vapour/air mixture (air=1)	: No data available.
Density (20°C)	: 1,22 kg/l
Solubility in water	: Complete solubility .
Log P Octanol/Water (20°C)	: -3,42
Auto-ignition temperature	: Not applicable.
Minimum ignition energy	: Not applicable.
Decomposition temperature	: 20 °C (Decomposition in function of temperature and incidence of light)
Viscosity (20°C)	: 2,6 mPa.s (Dynamic)
Explosive properties	: No chemical groups associated with explosive properties .
Oxidizing properties	: No chemical groups associated with oxidizing properties .

SECTION 10. Stability and reactivity**10.1. Reactivity**

Reactivity : The product is a strong oxidizer and reacts violently with combustibles and reducing agents. Reacts violently with acids . Corrosive to all metals.

10.2. Chemical stability

Stability : Stable at normal circumstances .

10.3. Possibility of hazardous reactions

Hazardous reactions : The substance decomposes by heating and under influence of sunlight in formation of toxic and corrosive vapours and in formation of oxygen that promotes fire. Contact with acids liberates toxic gas.

10.4. Conditions to avoid

Conditions to avoid : High temperatures , Light .

10.5. Incompatible materials

Materials to avoid : Combustibles , Reducing materials , Acids , Metals .

10.6. Hazardous decomposition products

Hazardous Decomposition Products : Chlorine , Hydrogen chloride (Gas).

SECTION 11. Toxicological information**11.1. Information on toxicological effects**

Acute toxicity

- Inhalation : Symptoms include: Sore throat , Cough , Difficulty in breathing .
 - Sodium hypochlorite, solution ...% Cl active : LC50 (Rat, inhalation, 1 h) : >10,5 mg/l (Air; OECD Guideline 403)
 - Sodium carbonate anhydrous : LC50 (Rat, inhalation, 2 h) : 2,3 mg/l (Aerosol; OECD Guideline 403)
 - Sodium hydroxide : LC50 (Rat, inhalation, 4 h) : No data available.
- Skin contact : Symptoms include: Redness , Pain .
 - Sodium hypochlorite, solution ...% Cl active : LD50 (Rabbit, dermal) : >20000 mg/kg (OECD Guideline 402)
 - Sodium carbonate anhydrous : LD50 (Rabbit, dermal) : >2000 mg/kg
 - Sodium hydroxide : LD50 (Rabbit, dermal) : No data available.
- Ingestion : Symptoms include: Sore throat , Abdominal pain , Vomiting .
 - Sodium hypochlorite, solution ...% Cl active : LD50 (Rat, oral) : 8910 mg/kg (OECD Guideline 401)
 - Sodium carbonate anhydrous : LD50 (Rat, oral) : 2800 mg/kg

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SECTION 11. Toxicological information (continued)

Skin corrosion/irritation Serious eye damage/irritation Aspiration hazard Respiratory or skin sensitisation Carcinogenicity Mutagenicity Reproductive toxicity Specific target organ toxicity - single exposure Specific target organ toxicity - repeated exposure	: Sodium hydroxide : LD50 (Rat, oral) : No data available. : Causes severe burns. : Causes serious eye damage. : Inhalation can cause pneumonia and/or pulmonary oedema, but only after signs of corrosive effects on the mucous membranes of the eyes and/or the upper respiratory tract. : Not sensitive . : Not listed as carcinogenic . : Not listed as mutagenic . : Not listed for reproductive toxicity . : To human : May cause respiratory irritation. : To human : Listed not for organ toxicity . For animals : No effects known.
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SECTION 12. Ecological information

12.1. Toxicity

Ecotoxicity	: • Sodium hypochlorite, solution ...% Cl active : LC50 (Fish, 96 h) : 0,062-0,095 mg/l (Oncorhynchus mykiss) • Sodium hypochlorite, solution ...% Cl active : EC50 (Daphnia magna, 48 h) : 0, 0141 mg/l (OECD Guideline 202) • Sodium hypochlorite, solution ...% Cl active : NOEC (Algae, 7 d) : 0,0021 mg/l (Fresh water) • Sodium carbonate anhydrous : LC50 (Fish, 96 h) : 300 mg/l (Lepomis macrochirus) • Sodium carbonate anhydrous : EC50 (Algae, 72 h) : No data available. • Sodium carbonate anhydrous : EC50 (Daphnia magna, 48 h) : 200-227 mg/l (Ceriodaphnia dubia) • Sodium hydroxide : LC50 (Fish, 96 h) : 35-189 mg/l • Sodium hydroxide : EC50 (Algae, 72 h) : No data available. • Sodium hydroxide : EC50 (Daphnia magna, 48 h) : 40,4 mg/l (Ceriodaphnia sp.)
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12.2. Persistence and degradability

Persistence and degradability	: • Sodium hypochlorite, solution ...% Cl active : Persistence and degradability : Inorganic . • Sodium carbonate anhydrous : Persistence and degradability : Inorganic . • Sodium hydroxide : Persistence and degradability : Inorganic .
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12.3. Bioaccumulative potential

Bioaccumulation	: • Sodium hypochlorite, solution ...% Cl active : Bioaccumulation : No bioaccumulation . • Sodium carbonate anhydrous : Bioaccumulation : No bioaccumulation . • Sodium hydroxide : Bioaccumulation : Bioaccumulation not expected .
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12.4. Mobility in soil

Mobility	: • Sodium hypochlorite, solution ...% Cl active : Mobility : Completely soluble in water . • Sodium carbonate anhydrous : Mobility : No absorption expected to the ground. • Sodium hydroxide : Mobility : High potential for mobility in soil.
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12.5. Results of PBT and vPvB assessment

Evaluation	: • Sodium hypochlorite, solution ...% Cl active : PBT/vPvB : No • Sodium carbonate anhydrous : PBT/vPvB : No • Sodium hydroxide : PBT/vPvB : No
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Photochemical ozone creation potential : No data available.
Ozone depletion potential : No data available.
Endocrine disrupting potential : No data available.
Global warming potential : No data available.

SECTION 13. Disposal considerations**13.1. Waste treatment methods**

Waste from residues/Unused products : The product has to be destroyed according to national or local legislation, by a company specialised in handling hazardous waste products.

European list of waste products : XXXXXX - European waste product code. This code is assigned on the basis of the most current applications and can not be representative for pollutions which are arisen at the effective use of the product. The producer of the waste has to evaluate its process himself and has to grant the appropriate waste coding. See Decision 2001/118/EC.

Removal contaminated packaging : Packing is to be used exclusively for the packing of this product. After use, empty and close the packing very carefully. In case of returned packing, the empty packing can be offered back to the supplier.

SECTION 14. Transport information**14.1. UN number**

UN Number : 1791

14.2. UN proper shipping name

ADR/RID Name : UN 1791 Hypochlorite solution, 8, II, (E)
ADN Name : UN 1791 Hypochlorite solution , 8, II
IMDG Name : UN 1791 Hypochlorite solution , 8, II, MARINE POLLUTANT
IATA Name : UN 1791 Hypochlorite solution, 8, II

14.3. Transport hazard classe(s)

Class : 8

14.4. Packing group

Packaging Group : II

14.5. Environmental hazards

Environmentally hazard : Yes
Marine pollutant : Yes

14.6. Special precautions for user

Danger number : 80
Hazard Label(s) : 8
EmS-N° : F-A , S-B

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Type ship : Not applicable.
Pollution category : Not applicable.

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SECTION 15. Regulatory information

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

- Inventories : Australian inventory (AICS): Listed in inventory.
 Canadian inventory (DSL): Listed in inventory.
 European inventory (EINECS): Listed in inventory.
 Japanese inventory (ENCS): Listed in inventory.
 Korean inventory (KECI): Listed in inventory.
 Chinese inventory (IECS): Listed in inventory.
 Philippine inventory (PICCS): Listed in inventory.
 Inventory of the United States (TSCA): Listed in inventory.
- NFPA n° : 2-0-2-OXY
- Relevant EU Rule(s) : Directive 96/82/EC of the Council of 9 December 1996 on the control of major-accident hazards involving dangerous substances
 Decision 2001/118/EC of the Commission of 16 January 2001 amending Decision 2000/532/EC as regards the list of wastes
 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
 Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (Reach)
- The restrictions in Annex XVII to Regulation (EC) No 1907/2006 must be observed.
- National regulations
- Germany : WGK : 2
 - Netherlands : Water damaging : 5
Decontamination exertion : B

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out for the material.

SECTION 16. Other information

This safety data sheet has been drawn up in accordance with Regulation (EC) No 1907/2006.
 This safety data sheet is exclusively made for industrial/professional use.

* Has changed compared to previous revision.

- * Changes : Section 2 , Section 8 , Section 9 .
- Sources of used key data : The information contained herein is based on the present state of our knowledge (Producer(s) , Chemical cards , ...)
 See also on the webaddress:
<http://apps.echa.europa.eu/registered/registered-sub.aspx#search>
- (EU)H-statement(s) : H290 - May be corrosive to metals.
 H314 - Causes severe skin burns and eye damage.
 H319 - Causes serious eye irritation.
 H335 - May cause respiratory irritation.
 H400 - Very toxic to aquatic life.
 H410 - Very toxic to aquatic life with long lasting effects.
 EUH031 - Contact with acids liberates toxic gas.
- Classification procedure : Met. Corr. 1; H290 - Based on test data (producer of component)
 Skin Corr. 1B; H314 - Additivity method
 Aquatic Acute 1; H400 - Calculation method
 Aquatic Chronic 2; H411 - Calculation method

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List of abbreviations and acronyms : ADN (Accord européen relatif au transport international des marchandises Dangereuses par voie de Navigation interieur) : European agreement concerning the international carriage of dangerous goods by inland waterways
Aquatic Acute 1 : Hazardous to the aquatic environment - Acute hazard - Category 1
ADR (Accord européen relatif au transport international des marchandises Dangereuses par Route) : European agreement concerning the international carriage of dangerous goods by road
Aquatic Chronic 1 : Hazardous to the aquatic environment - Chronic hazard - Category 1
Aquatic Chronic 2 : Hazardous to the aquatic environment - Chronic hazard - Category 2
CO : Carbon monoxide
DNEL (Derived No Effect Level) : an estimated safe exposure level
EC50 : median Effective Concentration
EmS (Emergency Schedule) : the first code refers to the relevant fire schedule and the second code refers to the relevant spillage schedule
IATA (International Air Transport Association) : provisions concerning the international carriage of dangerous goods by air
IMDG (International Maritime Dangerous Goods code)
LC50 : median Lethal Concentration
LD50 : median Lethal Dose
Met. Corr. 1 : Corrosive to metals - Category 1
M-Factor : a multiplying factor that is applied to the concentration of a substance classified as hazardous to the aquatic environment (Aquatic Acute 1; H400 or Aquatic Chronic 1; H410) and is used to derive by the summation method the classification of a mixture in which the substance is present
NFPA (National Fire Protection Association) or fire diamant
NOEC (No Observed Effect Concentration)
NVIC : National Poisoning Information Center
OECD : Organisation for Economic Cooperation and Development
PVC : Polyvinyl chloride
PBT : persistent, bioaccumulative and toxic
PNEC (Predicted No Effect Concentration) : concentration below which exposure to a substance is not expected to cause adverse effects
REACH : Registration, Evaluation, Authorisation and restriction of Chemicals
RID (Règlement concernant le transport International ferroviaire des marchandises Dangereuses) : Regulation concerning the International carriage of Dangerous goods by rail
SCL (Specific Concentration Limits)
Skin Corr. 1B : Skin corrosion - Category 1B
TWA (Time-Weighted Average) : the average exposure over a specified period
WGK (Wassergefährdungsklasse) : a German classification of substances that indicate the environmental hazard for surface water
vPvB : very persistent and very bioaccumulative

This information is to our knowledge correct and complete on the date of issue of this safety data sheet. The information only concerns the product and does not give any guarantee for the quality and the completeness of the properties of the product, or in case of mixing or using in any other process. It remains the responsibility of the user to assure himself that the information is suitable and complete concerning the special use he makes of the product.

BRENNTAG denies all responsibility for loss or damage resulting from the use of these data.

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