Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 17.09.2025 Version number 208.15 (replaces version 208.14) Revision: 17.09.2025

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

1.1 Product identifier

Trade name CAUSTIC SODA LIQ. 50 % MG

Other trade names:

Article number: 1000408701011
UFI: USF0-70GH-M00A-MXU5

1.2 Relevant identified uses of the substance or mixture and uses advised against
Industrial / commercial application
Restrictions on use:
Restrictions on use according to REGULATION (EC) No 1907/2006 ANNEX XVII apply to this product (see section 15).
Application of the substance / the mixture Basic chemical (without special defined application)

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:

STOCKMEIER Chemie GmbH & Co.KG, Am Stadtholz 37, DE - 33609 Bielefeld
Tel.: +49 521 / 30 37-0, ehs-bielefeld@stockmeier.de

STOCKMEIER Fluids GmbH & Co. KG, Sanssouci 12, DE – 58802 Balve
Tel.: +49 2375 917 310, fluids@stockmeier.com

BASSERMANN Minerals GmbH & Co. KG, Rudolf-Diesel-Straße 42, DE – 68169 Mannheim
Tel.: +49 621 15 01 0, verkauf@bassermann.de

STOCKMEIER CHEMIA Sp. z o. o., ul. Obornicka 277, PL - 60-691 Poznań
Tel.: +48 61 666 10 66, zamowienia@stockmeier.pl

STOCKMEIER QUIMICA, S.L.U., Avda. del Baix Llobregat, 3- 5, ES – 08970 Sant Joan Despí (Barcelona)
Tel.: +34 93 506 91 83, tecnico-calidad@stockmeier.es

STOCKMEIER NETHERLANDS B.V., Ridderpoort 5, NL - 2984 BG Ridderkerk
Tel.: +31 180 41 5988, info@stockmeier.nl

WigaChem GmbH - Brown-Boveri-Straße 6/1/22 - AT- 2351 Wiener Neudorf
Tel. 00432236/623-40, office@wigachem.at, www.wigachem.at

KEMTAN AG, Seewenweg 6, CH – 4153 Reinach
Tel.: +41 61 711 20 20, info@kemtan.ch

STOCKMEIER CHEMICALS BELUX SA/NV, Rue de la Station 17, BE – 1300 Limal
Tel.: +32 10 421-320, info@stockmeierchemicalsbelux.com

HDS – Chemie Handels GES.M.B.H., Bauernmarkt 24, AT - 1010 Wien
Tel.: +43 15 32 0 999, office@hds-chemie.at
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www.stockmeier.com

Informing department:
Product safety department. Tel.: 0049 / 521 / 3037-381
E-mail: ehs-bielefeld@stockmeier.de
1.4 Emergency telephone number:
This is an English-language document designed for the European region. For the emergency number and other country-specific data, please refer to the specific national versions of this safety data sheet.

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Counselling Centre for Poisoning, Mainz
Tel. (+49) 61 31 / 19 240.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

Met. Corr.1 H290 May be corrosive to metals.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS05

Signal word Danger

Hazard-determining components of labelling:
sodium hydroxide
Hazard statements
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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/doctor.
Additional information:
According to the current state of knowledge, no synthetic polymer microparticles > 0.01% are contained.
2.3 Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
Determination of endocrine-disrupting properties Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures
Description: Aqueous solution consisting of the following components.

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Trade name CAUSTIC SODA LIQ. 50 % MG

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Dangerous components:		
CAS: 1310-73-2 EINECS: 215-185-5 Reg.nr.: 01-2119457892-27	sodium hydroxide Met. Corr.1, H290; Skin Corr. 1A, H314; Eye Dam. 1, H318 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0,5 % ≤ C < 2 % Eye Irrit. 2; H319: 0,5 % ≤ C < 2 % substance with a Community workplace exposure limit	50%

SVHC
This preparation does not contain any substances of very high concern (SVHC) in a concentration of ≥ 0.1 % according to Regulation (EC) 1907/2006, Article 57.
Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures
General advice: Instantly remove any clothing soiled by the product.
After inhalation
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness bring patient into stable side position for transport.
After skin contact
Instantly wash with water and soap and rinse thoroughly. If skin irritation persists, seek medical advice.
After eye contact
Rinse immediately opened eye for several minutes under running water. Then consult doctor.
After swallowing
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; instantly call for medical help.
Information for doctor
If splashes get into the eyes, rinse immediately and consult an ophthalmologist.
Treatment of burns. Shock control. Pain relief. Antibiotic prophylaxis.
Caution Glottic oedema, which may occur with delay.
After inhalation of mists: Inhale dexamethasone spray (Auxiloson) until symptoms subside.
4.2 Most important symptoms and effects, both acute and delayed
Burning and pain of the eyes and skin. Respiratory distress. After swallowing, severe pain in the alimentary canal. State of shock.
4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing agents
Product is non-flammable. Use fire fighting measure that suit the surroundings.
5.2 Special hazards arising from the substance or mixture
Leaked out product reacts with base metal under development of hydrogen gas. Evaporated product irritates eyes and respiratory tracts.
5.3 Advice for firefighters
Protective equipment: Wear full protective suit with self-contained breathing apparatus.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Ensure adequate ventilation
Particular danger of slipping on leaked/spilled product.
Put on protective equipment and keep unprotected persons away.
6.2 Environmental precautions:
Prevent material from reaching sewage system, holes and cellars.
Dilute with much water.
In case of release of larger quantities, inform competent authorities.
6.3 Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
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
Open and handle container with care.
When diluting, always stir the product into standing water.
Prevent eye and skin contact.
Avoid contact with metals like aluminum, magnesium, zinc or lead (formation of hydrogen). Do not mix with acids.
Information about protection against explosions and fires: The product is not flammable
7.2 Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and containers:
Observe laws and regulations on the storage and use of substances hazardous to water.
Provide alkali-resistant floor.
Do not use light alloy containers.
Information about storage in one common storage facility:
Do not store together with acids.
Store away from foodstuffs.
Storage class 8 B L (VCI - Konzept, 2007)
7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with critical values that require monitoring at the workplace:	
1310-73-2 sodium hydroxide	
MAK (Germany)	vgl.Abschn.IIb

DNELs		
1310-73-2 sodium hydroxide		
Inhalative	DNEL (worker)	1 mg/m³ (Long-term, local effects) (most sensitive endpoint: Irritation)
	DNEL (population)	1 mg/m³ (Long-term, local effects)

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Additional information: The lists that were valid during the compilation were used as basis.

8.2 Exposure controls
Individual protection measures, such as personal protective equipment
General protective and hygienic measures
Keep away from food, beverages and fodder.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not inhale dust / smoke / mist.
Breathing equipment: Use breathing protection only when aerosol or mist is formed.
Hand protection
Protective gloves (EN 374).
Only use chemical-protective gloves with CE-labelling of category III.
Material of gloves
Butyl rubber, recommended material thickness: ≥ 0,5 mm, breakthrough time: ≥ 480 min.
Polyvinylchlorid (PVC), recommended thickness of the material: ≥ 0,5 mm, penetration time: ≥ 480 Min.
Nitrile rubber (NBR), recommended material thickness: ≥ 0,35 mm, breakthrough time: ≥ 480 min.
Chloroprene rubber, CR, recommended thickness of the material: ≥ 0,5 mm, penetration time: ≥ 480 min.
Fluorocarbon rubber (Viton), recommended thickness of the material: ≥ 0,4 mm, penetration time: ≥ 480 min.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Change protective gloves if you notice signs of wear.
Eye/face protection Tightly sealed safety glasses.
Body protection:
Standard protective work clothing. Chemical resistant safety shoes or boots. If skin contact may occur, wear impermeable protective clothing for this solution.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
General Information

Physical state	Liquid
Colour:	Colourless
Smell:	Odourless
Odour threshold:	Not determined.
Melting point/freezing point:	12 °C
Boiling point or initial boiling point and boiling range	100 °C (7732-18-5 water, distilled, conductivity or of similar purity)
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Product is non-flammable nor potentially explosive
Decomposition temperature:	Not determined.
pH at 20 °C	14

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pH-value:	
Viscosity:	
Kinematic viscosity	Not determined.
dynamic:	Not determined.
Solubility	
Water:	Fully miscible
Partition coefficient n-octanol/water (log value)	Not applicable
Vapour pressure at 20 °C:	23 hPa (7732-18-5 water, distilled, conductivity or of similar purity)
Density and/or relative density	
Density at 20 °C	1,52 g/cm³
Relative density	Not determined.
Vapour density	Not determined.

9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Self-inflammability:	Product is not selfigniting.
Explosive properties:	Product is not potentially explosive
Evaporation rate	Not determined.

Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	May be corrosive to metals.
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity see section 10.3
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
10.3 Possibility of hazardous reactions
Strong exothermic reaction with acids

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Reacts with light alloys to form hydrogen
10.4 Conditions to avoid No further relevant information available.
10.5 Incompatible materials:
Aluminium, zinc, tin and other compounds of these metals.
Strong acids
10.6 Hazardous decomposition products: Hydrogen
Additional information:
The solution reacts with carbon dioxide from the air to form sodium carbonate or hydrogen carbonate.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
Acute toxicity Based on available data, the classification criteria are not met.
Primary irritant effect:
Skin corrosion/irritation
Causes severe skin burns and eye damage.
Serious eye damage/irritation
Causes serious eye damage.
Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
Germ cell mutagenicity Based on available data, the classification criteria are not met.
Carcinogenicity Based on available data, the classification criteria are not met.
Reproductive toxicity Based on available data, the classification criteria are not met.
STOT-single exposure Based on available data, the classification criteria are not met.
STOT-repeated exposure Based on available data, the classification criteria are not met.
Aspiration hazard Based on available data, the classification criteria are not met.
Additional toxicological information:
CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
no CMR effects available in according to present state of knowledge
11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:	
1310-73-2 sodium hydroxide	
LC 50 / 96 h	196 mg/l (fish)
EC 50 / 48 h	40,4 mg/l (Crustacea)

12.2 Persistence and degradability
The methods for determining biodegradability are not applicable to inorganic substances.
12.3 Bioaccumulative potential No bioaccumulation expected.
12.4 Mobility in soil No further relevant information available.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.

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12.7 Other adverse effects
Remark:
Datas refer to the undilute 100 % substance
Harmful effect on fish, plankton and sessile organisms possible due to pH shift.
Behaviour in sewage processing plants: No inhibition of bacterial activity after neutralisation.
Additional ecological information:
General notes:
Do not allow to enter drainage system, surface or ground water
Water hazard class 1 (Self-assessment): slightly hazardous for water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
The note below refers to the product left as it is and not to further processed products. When mixed with other products, other disposal routes may be required; if in doubt, consult the supplier of the product or the local authority.
Recommendation
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
A used product should be recycled or used in other contexts, otherwise be handed over to an appropriate disposal, e.g. neutralisation.
Waste disposal key number:
Since 1 January 1999, the waste code numbers have not only been product-related but essentially application-related. The waste code number valid for the application can be taken from the European Waste Catalogue.

European waste catalogue	
06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 02 00	wastes from the MFSU of bases
06 02 04*	sodium and potassium hydroxide

Uncleaned packagings: Disposal in accordance with official regulations.
Recommendation:
Empty containers completely and send them cleaned for reconditioning or recycling. Dispose of containers only in consultation with local authorities.
Recommended cleaning agent: Water, if necessary with cleaning agent.

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SECTION 14: Transport information

14.1 UN number or ID number	
ADR/RID, IMDG, IATA	UN1824
14.2 UN proper shipping name	
ADR/RID	1824 SODIUM HYDROXIDE SOLUTION
IMDG, IATA	SODIUM HYDROXIDE SOLUTION
14.3 Transport hazard class(es)	
ADR/RID	
Class	8 (C5) Corrosive substances.
Label	8
IMDG, IATA	
Class	8 Corrosive substances.

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Label	8
14.4 Packing group **ADR/RID, IMDG, IATA**	II
14.5 Environmental hazards: **Marine pollutant:**	No
14.6 Special precautions for user **Kemler Number:** **EMS Number:** **Segregation groups** **Stowage Category** **Segregation Code**	Warning: Corrosive substances. 80 F-A,S-B (SGG18) Alkalis A SG35 Stow "separated from" SGG1-acids
14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
Transport/Additional information:	
ADR/RID **Limited quantities (LQ)** **Excepted quantities (EQ)**	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
IMDG **Limited quantities (LQ)** **Excepted quantities (EQ)**	1L Código E4 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1824 SODIUM HYDROXIDE SOLUTION, 8, II

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the CLP regulation.
Hazard pictograms

GHS05

Signal word Danger

Hazard-determining components of labelling:
sodium hydroxide
Hazard statements
H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
Precautionary statements
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
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/doctor.

Directive 2012/18/EU
Named dangerous substances - ANNEX I None of the ingredients is listed.

LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)
None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II
None of the ingredients is listed.

REGULATION (EU) 2019/1148

Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.

National regulations
Information about limitation of use:
Employment restrictions concerning young persons must be observed.

Other regulations, limitations and prohibitive regulations
Instruction sheet BG Chemie: BGI 595 "Irritant substances/corrosive substances" formerly M 004

Substances of very high concern (SVHC) according to REACH, Article 57
None of the ingredients is listed.

VOC (EU) 0,0 g/l
15.2 Chemical safety assessment: A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2023/707.

UFI market placements:
Germany, Bulgaria, Denmark, DKE, ESE, European Union, Finland, SFS, France, Greece, Ireland, ISE, Croatia, Latvia, FL, Lithuania, LTE, Malta, Netherland, Norway, Germany, Poland, Portugal, Romania, Sweden, Slovakia, Slovenia, Spain, Czechia, Cyprus, Italy
Relevant phrases
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.

Department issuing data specification sheet: See section 1.3: Responding area
Date of previous version: 08.05.2025

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Abbreviations and acronyms:
RPE: Respiratory Protective Equipment
RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)
DNEL: Derived No-Effect Level (REACH)
SVHC: Substance of Very High Concern
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Met. Corr.1: Corrosive to metals – Category 1
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Eye Dam. 1: Serious eye damage/eye irritation – Category 1

*** Data compared to the previous version altered.**

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Annex: Exposure scenario 1

Short title of the exposure scenario Industrial and professional use
Sector of Use
SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
Used for a variety of purposes in a wide range of sectors and categories.
Product category Used for a variety of purposes in a wide range of sectors and categories.
Process category
PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4 Chemical production where opportunity for exposure arises
PROC5 Mixing or blending in batch processes
PROC7 Industrial spraying
PROC8a Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
PROC10 Roller application or brushing
PROC11 Non industrial spraying
PROC13 Treatment of articles by dipping and pouring
PROC14 Tabletting, compression, extrusion, pelletisation, granulation
PROC15 Use as laboratory reagent
PROC19 Manual activities involving hand contact
PROC23 Open processing and transfer operations at substantially elevated temperature
PROC24 High (mechanical) energy work-up of substances bound in /on materials and/or articles
PROC26 Handling of solid inorganic substances at ambient temperature
The above process categories are considered the most important, but other process categories could also be possible.
be possible.
Environmental release category
ERC1 Manufacture of the substance
ERC2 Formulation into mixture
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC6a Use of intermediate
ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC7 Use of functional fluid at industrial site
ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
ERC9a Widespread use of functional fluid (indoor)
The above environmental release categories are considered the most important, but other environmental release categories could also be possible.

Conditions of use
Duration and frequency Includes daily exposures of up to 8 hours (unless otherwise specified).
Environment < 365 days/year
Physical parameters
Physical state
Fluid
Solid in various forms
(low dustiness)

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Concentration of the substance in the mixture All concentrations covered.

Risk management measures
Worker protection
Organisational protective measures
Activity must only be carried out by trained personnel to prevent/minimise exposure.
Workers in the high-risk processes/areas must be trained to
a) avoid working without respiratory protection; and
b) understand the corrosive properties and in particular the inhalation effects of the substance/substances; and
c) follow the employer's safety procedures.
The employer must ensure that the necessary personal protective equipment is available and used in accordance with the instructions.
Technical protective measures
Where appropriate, replace manual processes with automated and/or closed processes to avoid irritating mists, sprays and subsequent possible spills:
- Use closed systems or covers for open containers.
- Transport via pipes and fill/empty containers with automated systems (e.g. priming pumps).
- Use tongs and gripping arms with long handles to avoid direct contact and exposure from splashes (no overhead work).
- Local exhaust systems and/or general ventilation are good working practice.
Personal protective measures
In case of development of vapours/aerosols
Use suitable filter apparatus or surrounding-air undependent breathing apparatus.
Tightly sealed safety glasses.
Protective gloves (EN 374).
Only use chemical-protective gloves with CE-labelling of category III.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
Butyl rubber, recommended material thickness: ≥ 0,5 mm, breakthrough time: ≥ 480 min.
Polyvinylchlorid (PVC), recommended thickness of the material: ≥ 0,5 mm, penetration time: ≥ 480 Min.
Nitrile rubber (NBR), recommended material thickness: ≥ 0,35 mm, breakthrough time: ≥ 480 min.
Chloroprene rubber, CR, recommended thickness of the material: ≥ 0,5 mm, penetration time: ≥ 480 min.
Fluorocarbon rubber (Viton), recommended thickness of the material: ≥ 0,4 mm, penetration time: ≥ 480 min.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Standard protective work clothing.
Environmental protection measures
Water
The environmental risk management measures aim to avoid a release of the substance into municipal wastewater or surface waters.
In case of such releases, significant pH changes are to be expected.
Regular checks of the pH value during the discharge into open waters must be carried out.
In general, releases must be carried out in such a way that pH changes in the receiving surface water are minimal.
Usually, most aquatic organisms can tolerate pH values in the range of 6-9.
This is also reflected in the description of the standard OECD tests with aquatic organisms.
Disposal measures
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Disposal in accordance with official regulations.

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Exposure estimation
Worker (dermal)
When handling corrosive substances and formulations, direct contact occurs only occasionally, therefore it is assumed that daily dermal exposure can be neglected. Dermal exposure to the substance was therefore not quantified.

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Annex: Exposure scenario 2

Short title of the exposure scenario Consumer end use
Sector of Use SU21 Consumer uses: Private households / general public / consumers
Product category Used for a variety of purposes in a wide range of sectors and categories.
Environmental release category
ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8b Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
ERC9a Widespread use of functional fluid (indoor)
The above environmental release categories are considered the most important, but other environmental release categories could also be possible.
Description of the activities / processes covered in the Exposure Scenario
See section 1 of the annex to the Safety Data Sheet.

Conditions of use
Duration and frequency
5 min
Frequency of use:
1 Event(s)/day (unless otherwise specified)
Physical parameters
Physical state
Fluid
Solid in various forms
(low dustiness)
Concentration of the substance in the mixture
All concentrations covered.
Typical concentrations:
Floor covering remover (<10%)
Hair straightener (<2%)
Oven cleaner (<5%)
Drain cleaner (liquid: 30%, solid: < 100%)
Detergent (<1.1%)
Other operational conditions
NaOH products with a concentration > 2% are corrosive, which is why the personal protective equipment described is obligatory.
Solutions of NaOH with less than 2% of the substance have no corrosive properties.
For products with a NaOH concentration between 0.5% and 2%, the described personal protective equipment is considered good practice. No protection is required for NaOH concentrations < 0.5%.
Other operational conditions affecting environmental exposure No special measures required.
Other operational conditions affecting worker exposure
Avoid contact with eyes.
Avoid contact with the skin.
Other operational conditions affecting consumer exposure Keep out of the reach of children.
Other operational conditions affecting consumer exposure during the use of the product
Not applicable.

Risk management measures
Worker protection
Organisational protective measures No special measures required.
Technical protective measures Ensure that suitable extractors are available on processing machines
Personal protective measures
Do not inhale dust / smoke / mist.
Avoid contact with the skin.

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Avoid contact with the eyes.
Tightly sealed safety glasses.
Protective gloves (EN 374).
Only use chemical-protective gloves with CE-labelling of category III.
Standard protective work clothing. Chemical-resistant safety shoes or boots. If skin contact may occur, wear protective clothing impermeable to this substance.

Measures for consumer protection
Ensure adequate labelling.
Keep locked up and out of the reach of children.
It is necessary to use resistant labelling material to avoid damage and loss of labelling under normal conditions of use and storage. A quality defect in the packaging causes the loss of information on the hazards and the instructions for use.
Provide household chemicals containing more than 2% substance and accessible to children with a child-resistance and tactile hazard warning (adaptation to technical progress of Directive 1999/45/EC, annex IV, Part A and Article 15(2) of Directive 67/548 in the case of corresponding dangerous preparations and substances for household use). This can help prevent accidents to children and other sensitive groups in society.
It is advisable to circulate only very viscous preparations.
It is advisable to circulate only small quantities.
For use in batteries, use sealed items with long maintenance intervals.
Provide improved instructions for use and product information to consumers to avoid incorrect use.
To reduce accidents, these products should not be used in the presence of children and other sensitive groups.
To avoid misuse NaOH, the directions for use should include a warning about hazardous mixtures.
Do not place product in fan openings or slots.
For products containing the solid or liquid substance in concentrations > 2%: Wear puncture-resistant gloves made of suitable materials. If splashing may occur, wear tight-fitting safety goggles and face shield. Respiratory protection is required if vapours occur. If product dust occurs, wear dust mask with at least filter type P2.

Environmental protection measures
Water
Generally, prior to the introduction of wastewater into wastewater treatment plants a neutralisation is required.

Disposal measures
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
A used product should be recycled or used in other contexts, otherwise be handed over to an appropriate disposal, e.g. neutralisation.

Disposal procedures
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Waste type Partially emptied and uncleaned packaging

Exposure estimation
Environment
Consumer uses refer to already diluted products that are further diluted in the sewerage system before reaching the wastewater treatment plant or surface water. Therefore, consumer use of NaOH is adequately controlled for the environment.
Exposure assessment method: Qualitative assessment
Compartment: all
Exposure level: unspecified
Risk quotient (PEC/PNEC): < 1

Consumer
Most critical use (spray oven cleaner):
Exposure assessment method: Consexpo
Value type: Short-term, inhalation
Exposure level: < 1.6 mg/m³
Risk ratio (exposure value/DNEL): < 1

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Based on the RMMs applied, a risk to humans and the environment is sufficiently controlled (RCR ≤ 1).

Inhalation-local (long-term):
As the NaOH concentration and the amount used are smaller compared to professional use and the DNEL and RMMs are the same, consumer use can be considered safe.

Guidance for downstream users
Whether the downstream user acts within the scope of the Exposure Scenario can be verified based on the information in sections 1 to 8.
For the risk assessment, the tools recommended by ECHA can be used.