

SAFETY DATA SHEET

Safety data sheet according to (EF) no. 1907/2006.

POINT 1: Identification of material/compounds and of the company/factory

1.1. Product identifier:

Pure benzoic acid up till 30 %

UFI: ER10-J022-T00A-2YM5

1.2. Relevant identifying use of the material or compound and the usage that is contraindicated:

Liquid supplementary feed. Only for commercial use.

1.3. Detailed information about the supplier for the safety data sheet:

Jorenku A/S

Teglvaerksvej 11

4733 Tappernoeye

Denmark

Tel.: +45 56214070

Responsible for safety data sheet (e-mail): jorenku@jorenku.dk

1.4. Emergency phone:

Contact the poison centre in your own country.

POINT 2: Identification of danger

2.1. Classification of the material or compound:

Corrosive liquid.

CLP (1272/2008): Met. Corr. 1;H290 Skin Corr. 1B;H314 Eye Dam. 1;H318

2.2. Label elements:



Contains:

Sodium hydroxyde

H290:

May be corrosive to metals.

H314:

Causes severe skin burns and eye damage.

P280:

Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353+P310:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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/doctor.

P390:

Absorb spillage to prevent material damage.

P406:

Store in corrosive resistant stainless steel container with a resistant inner liner

2.3. Other dangers:

PBT/vPvB: The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII.

Endocrine disrupting properties: The ingredients are not considered endocrine disruptors according to the criteria of Regulation 2017/2100 or Regulation 2018/605.

POINT 3: Compensation of/information about contents

3.1. Compensation of/information about contents

3.2. Compounds:

Substance name	CAS	EF-No.	Index-no.	REACH reg.no.	Substance Classification	Note
Sodium benzoate	532-32-1	208-534-8	-	01-2119460683-35	Eye Irrit. 2;H319	-
Sodium hydroxyde	1310-73-2	215-185-5	011-002-00-6	01-2119457892-27	Met. Corr. 1;H290 Skin Corr. 1A;H314 Eye Dam. 1;H318	1

- 1) SCL (Specific Concentration limits) for classification: Skin Corr. 1A;H314: $C \geq 5\%$; Skin Corr. 1B;H314: $2\% \leq C < 5\%$; Skin Irrit. 2;H315/Eye Irrit. 2;H319: $0,5\% \leq C < 2\%$ (C&L list, EU harmonisation).

The wording of the hazard statements - see paragraph 16.

POINT 4: First aid measures

4.1. Description of first aid measures:

Inhalation: Bring the person to fresh air. Keep calm under supervision. In case of discomfort: Seek medical attention.

Skin: Immediately remove contaminated clothing. Rinse skin and wash thoroughly with soap and water. By continued irritation: Seek medical attention.

Eyes: Thoroughly rinse with water or physiological saline for at least 30 min. If possibly remove contact lenses and open the eye wide. By continued irritation: Seek medical attention. Continue rinsing during transport to the doctor/hospital.

Ingestion: Immediately rinse mouth thoroughly and drink water in copious amounts. **Do not induce vomiting.** If vomiting occurs, keep the head low to avoid stomach contents in the lungs. Immediately call an ambulance.

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

Corrosion of airways with throat pain, cough and shortness of breath, which may occur several hours after exposure. Corrosion of the mucous membranes in the mouth as well as skin and eyes with severe pain. Corrosion can cause severe and irreversible tissue damage. By formation of chlorine vapors, there is a risk of water in the lungs (lung edema), with symptoms (shortness of breath) that may occur several hours after exposure.

4.3. Indication of whether emergency medical attention and special treatment are needed:

In case of unconsciousness or discomfort: Call a doctor or an ambulance immediately. Show this safety data sheet to doctors or casualty ward.

POINT 5: Fire suppression

5.1. Suppression methods:

Cannot burn.

5.2. Special dangers in connection with the material or compound:

Not relevant - cannot burn.

5.3. Indication for a fire department:

Use compressed air mask for heavy smoke.

POINT 6: Accidental release measures

6.1. Personal precautions, personal protective equipment, and emergency procedures:

Use personal protective equipment - see point 8. Ensure good ventilation.

6.2. Environmental protection indications:

Avoid discharge to drains - see point 12. Inform local environmental authorities in case of spillage to the environment.

6.3. Methods and equipment for containment and cleaning:

Soaked up with granulate or similar and handle as chemical waste. Rinse thoroughly with water. Further waste handling - see point 13.

6.4. References to other points:

See above.

POINT 7: Handling and storage

7.1. Measures for safe handling:

AVOID ALL CONTACT also during dilution! Immediately change contaminated clothing. Avoid inhalation of aerosol mists. Ensure effective ventilation. After use, wash with plenty of soap and water. There must be access to water and an eyewash bottle. Moisturiser protect the skin against excessive dryness and can be used with great advantage at the end of the work.

7.2. Conditions for safe storage, including any incompatibility:

Store in well-closed original container in a cool (frost-free) and well-ventilated place. Suitable materials for container: Stainless steel or carbon steel. Sodium hydroxyde can corrode rubber, painted surfaces and certain types of plastic. Sodium hydroxyde and its solutions may not be stored in galvanized containers or containers with light metal bungs, as this leads to the development of explosive hydrogen gas. Safe, inaccessible to unauthorized persons, separated from food, feed, medicines etc.

7.3. Special usage:

See use - point 1.

PUNKT 8: Exposure control/personal protective equipment

8.1. Control parameter:

AT-limit value (reg. 1054 of 28.06.2022):

	8-hours limit value	Short-term limit value	Anm.
Sodium hydroxyde	-	2 mg/m ³	L

E = The substance has an EF-limit value

L = Threshold limit value-ceiling value that must not be exceeded.

DNEL:	Exposure	Value	Population	Effects
Sodium benzoate	Long-term, skin	62.5 mg/kg	Workers	Systemic
	Long-term, inhalation	0.1 mg/m ³	Workers	Local
	Long-term, inhalation	3 mg/m ³	Workers	Systemic
Sodium hydroxyde	Long-term, inhalation	1 mg/m ³	Workers	Local
	Long-term, inhalation	1 mg/m ³	Consumers	Local
PNEC:	Medium	Value		
Sodium benzoate	Fresh water	0.13 mg/l		
	Sea water	0.013 mg/l		
	Fresh water sediment	1.76 mg/kg		
	Sea water sediment	0.176 mg/kg		
	Sewage works (STP)	10 mg/l		
	Soil	0.000265 mg/kg		
Sodium hydroxyde	Sporadic discharge	0.305 mg/l		
Sodium hydroxyde	No data	-		

8.2. Exposure control:

Appropriate measures for exposure control: Provide effective ventilation.

Personal protective equipment:

Inhalation: In case of insufficient ventilation or spurting: use approved mask with particle filter P2 (EN149). The filters have a limited service life (must be changed). Read the manufacturer's instructions.

Skin: Use protective gloves (EN374) of nitrile rubber (> 0.4 mm) or butyl rubber. Expected breakthrough time: Up to 3 hours.

Eyes: Close-fitting safety glasses (EN166) or face shield (EN 175).

Environmental exposure controls: Avoid discharge to the environment/drain.

POINT 9: Physical and chemical characteristics

9.1. Information about basic physical and chemical characteristics:

Appearance:	Liquid
Colour:	Uncoloured
Odor:	Not decided
Melting point/freezing point (°C):	Not decided
Boiling point or bubble-point and boiling point interval (°C):	Not decided
Ignitability (solid, gaseous):	Not decided
Upper/lower explosion limits (vol-%):	Not decided
Flash point (°C):	Not decided
Auto-ignition temperature (°C):	Not decided
Self-accelerating decomposition temperature (°C):	Not relevant
pH:	Strongly alkaline
Kinematic viscosity (mm ² /s at 40°C):	Not decided
Solubility (mg/l):	Soluble in water
Partition coefficient n-octanol/water Log K _{ow} :	Not decided
Vapor pressure (hPa, 20°C):	Not decided
Density and/or relative density (g/cm ³):	>1
Relative vapor density (air=1):	Not decided
Particulate properties:	Not decided for liquids



9.2. Other information:

None known.

POINT 10: Stability and reactivity

10.1. Reactivity:

See point 10.5.

10.2. Chemical stability:

Stable under recommended storage conditions - see point 7.

10.3. Risk of dangerous reactions:

Sodium hydroxyde dissolves fat surfaces and attacks gaskets, certain plastics and rubber materials. Reacts with metals to form hydrogen with the risk of forming explosive hydrogen/air mixtures.

10.4. Conditions that should be avoided:

May not be exposed to heating (e.g. sunlight), as overpressure can develop. Avoid frost.

10.5. Materials that should be avoided:

Avoid contact with light metals such as aluminium, zinc and tin or other non-alkali-resistant surfaces (risk of formation of flammable and explosive hydrogen gas).

10.6. Dangerous decomposition products:

By heavy heating, very toxic gases are formed.

POINT 11: Toxicological information

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

Acute toxicity: Based on available data, the classification criteria are not met.

Skin corrosion/irritation: Skin Corr. 1B; H314 Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Eye Dam. 1; H318 Causes serious eye damage.

Respiratory or skin sensitization: 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.

Reproduction toxicity: Based on available data, the classification criteria are not met.

Single STOT-exposure: Based on available data, the classification criteria are not met.

Repeated STOT-exposures: Based on available data, the classification criteria are not met.

Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Danger class	Data	Test	Data source
Acute toxicity: Inhalation	No available data.	-	-
Dermal	LD ₅₀ (rabbit) = 1350 mg/kg - ætsning (Sodium hydroxyde)	Not informed	IUCLID
Oral	LD ₁₀₀ (rabbit) = 500 mg/kg - ætsning (Sodium hydroxyde) LD ₅₀ (rat) = 2100 mg/kg (Sodium benzoate)	Not informed Not informed	IUCLID ECHA
Corrosivity/ irritation:	Strong corrosion (< 3 min), rabbit (Sodium hydroxyde) No skin irritation, rabbit (Sodium benzoate) Mild eye irritation, rabbit (Sodium benzoate)	Not informed OECD 404 OECD 405	IUCLID IUCLID IUCLID
Sensitisation:	No skin sensitisation, guinea pig (Sodium hydroxyde) No skin sensitisation, in-vitro (Sodium benzoate)	Intracutan LLNA	IUCLID ECHA

Danger class	Data	Test	Data source
CMR:	No genotoxicity by in vitro test (Sodium hydroxyde)	AMES	IUCLID
	No carcinogenicity, rodent (Sodium benzoate)	Not informed	IUCLID
	No mutagenicity by in vivo test (Sodium benzoate)	Dominant lethal	IUCLID
	No reprotoxicity, rodent (Sodium benzoate)	Not informed	IUCLID

Usual exposure methods: Lungs, skin, and gastrointestinal tract.

Inhalation: Corrosive to the respiratory tract with throat ache and cough and risk of water in the lungs (lung edema). Be aware that the symptoms (shortness of breath) may occur several hours after exposure.

Skin: Corrosive with redness, wounds and severe pain. Also with a degreasing effect. Chlorine vapors can be absorbed through the skin.

Eyes: Corrosive with redness, severe pain, loss of vision and swelling.

Ingestion: Strong corrosive to mucous membranes in the mouth, throat and gastrointestinal tract with stomach pain, nausea, vomiting, diarrhoea, stomach bleeding, drop in blood pressure, shortness of breath, cramps, restlessness and salivation.

Chronic effects: None known.

11.2. Information about other hazards: None known.

POINT 12: Environmental information

12.1. Toxicity:

Aquatic	Data	Test (Media)	Data source
Fish	LC ₅₀ (Gambusia affinis, 96h) = 125 mg/l (Sodium hydroxyde)	Static (FW)	IUCLID
	LC ₅₀ (Oncorhynchus mykiss, 96h) = 45 mg/l (Sodium hydroxyde)	Not informed (FW)	Supplier
	LC ₅₀ (Pimephales promelas, 96h) = 484 mg/l (Sodium benzoate)	Flow through (FW)	IUCLID
Crustacean	EC ₅₀ (Ceriodaphnia dubia, 48h) = 40,4 mg/l (Sodium hydroxyde)	Not informed (FW)	EPA Ecotox
	EC ₅₀ (Daphnia magna, 48h) = 30 mg/l (Sodium hydroxyde)	Not informed (FW)	Supplier
	EC ₅₀ (Daphnia magna, 48h) < 650 mg/l (Sodium benzoate)	Not informed (FW)	IUCLID
Alga	EC ₅₀ (Pseudokirchneriella subcapitata, 72h) > 30,5 mg/l (Sodium benzoate)	OECD 201 (FW)	Supplier

12.2. Persistence and degradability:

Sodium hydroxyde is inorganic. Methods for determining the biodegradability do not apply to inorganic substances.

Sodium benzoate is degraded 90 % after 7 days in an OECD 301B test, and is thus rapidly degradable.

12.3. Bioaccumulative potential:

Sodium hydroxyde: Log K_{ow} < 0 (no significant bioaccumulation).

Sodium benzoate: Log K_{ow} = -2.13 (no significant bioaccumulation).

12.4. Mobility in soil:

Sodium benzoate: K_{oc} (calculated) < 20 (very high mobility in land treatment is expected).

Sodium hydroxyde is soluble in water and, when dissolved in water, will split into sodium and hydroxyde ions, for which high mobility in sland treatment is expected.

12.5. Results of PBT and vPvB assessment:

The ingredients are not PBT/vPvB according to the criteria in REACH annex XIII.

12.6. Endocrine-disrupting capacities:

None known.

12.7. Other adverse effects:

Emissions of larger amounts can change the pH value in the aquatic environment and shift the balance of the ecosystems.

POINT 13: Removal

13.1. Methods for waste handling:

The chemical must be considered as hazardous waste. Use the local authority's collection scheme.

Chemical waste group: H

EAK-code: 02 01 08

POINT 14: Transport information

14.1. UN-number or ID-number: 1760

14.2. UN-shipment designation (UN proper shipping name): CORROSIVE ACIDIC ORGANIC LIQUID, N.O.S. (sodium hydroxyde)

14.3. Transport danger class(es): 8

14.4. Packaging group: II

14.5. Environmental dangers: None.

14.6. Special regulations for the user: None.

14.7. Bulk transport by sea according to IMO instruments: Not relevant.

POINT 15: Information about regulations

15.1. Special determinations/special rules for the material or compound with respect to safety, health and environment:

The product must not be used commercially by young people under 18 years of age. (cf. the working environment authority's report on the performance of work).

Feed additives are covered by EU regulation no. 1831/2003 on feed additives.

PR-no.: 4456882

15.2. Chemical safety evaluation:

No CSR.

POINT 16: Other information

Hazard statements given under point 3:

H290: May be corrosive to metals.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

JORENKU Benzoic Acid

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Abbreviations:

AT = Working environment authority
CMR = carcinogenic, mutagenic, or toxic to reproduction
CSR = Chemical Safety Report
DNEL = Derived No-Effect Level
EC₅₀ = Effect Concentration 50 %
LC₅₀ = Lethal Concentration 50 %
LD₅₀ = Lethal dosage 50 %
PBT = Persistent, Bioaccumulative, Toxic
PNEC = Predicted No-Effect Concentration
FW = Fresh Water
vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA = REACH Registration dossier from ECHA's website
EPA Ecotox = US Environmental Protection Agency (database with ecotoxicological data for chemical compounds)
IUCLID = International Uniform Chemical Database Information
The supplier's safety data sheet

Advice on training / instruction:

The product may only be used by persons who are carefully instructed in the execution of the work and who have knowledge of the contents of this safety data sheet.

Changes since previous version:

Not relevant - first edition.

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