SAFETY DATA SHEET
SODIUM HYDROGENSULPHATE

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

1.1. Product identifier

Product name	SODIUM HYDROGENSULPHATE
Product number	1386
Synonyms; trade names	SODIUM BISULPHATE, DRY ACID, pH MINUS, SODIUM ACETATE SULPHATE, POOL ACID, pH REDUCER, BRISWIM DRY ACID, BRISWIM SPA FILTER CLEAN, BRISWIM SPA PH REDUCER, POOL PHA, SODIUM BISULFATE, ANHYDROUS, TECHNICAL GRADE, SODIUM BISULFATE GRAN, SOD BISULPHATE DNX, DRY ACID SGA
REACH registration number	01-2119552465-36-XXXX
CAS number	7681-38-1
EU index number	016-046-00-X
EC number	231-665-7

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

Identified uses	Cleaning agent. pH control

1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	1386

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Eye Dam. 1 - H318
Environmental hazards	Not Classified

2.2. Label elements

EC number	231-665-7

SODIUM HYDROGENSULPHATE

Hazard pictograms

Signal word	Danger
Hazard statements	H318 Causes serious eye damage.
Precautionary statements	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. 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.

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	SODIUM HYDROGENSULPHATE
REACH registration number	01-2119552465-36-XXXX
EU index number	016-046-00-X
CAS number	7681-38-1
EC number	231-665-7
Composition comments	The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. Get medical attention immediately.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Continue to rinse for at least 15 minutes. Get medical attention.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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

Ingestion	May cause discomfort if swallowed.
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	Causes serious eye damage.

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

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

SODIUM HYDROGENSULPHATE

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Oxides of the following substances: Sulphur.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid inhalation of dust. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid spilling. Avoid inhalation of dust and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Ingredient comments No exposure limits known for ingredient(s).

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PNEC

- Fresh water; 11.09 mg/l
- marine water; 1.109 mg/l
- Intermittent release; 17.66 mg/l
- Sediment (Freshwater); 40.2 mg/kg/day
- Sediment (Marinewater); 4.02 mg/kg/day
- Soil; 1.54 mg/kg/day
- STP; 800 mg/l

8.2. Exposure controls

Protective equipment

Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. The selected gloves should have a breakthrough time of at least 8 hours. Rubber (natural, latex). Chloroprene rubber. Butyl rubber. Polyvinyl chloride (PVC). Protective gloves should have a minimum thickness of 0.5 mm. To protect hands from chemicals, gloves should comply with European Standard EN374.

Other skin and body protection

Wear suitable protective clothing as protection against splashing or contamination. Wear rubber apron. Wear rubber footwear.

Hygiene measures

Provide eyewash station. Avoid inhalation of dust and vapours. Avoid contact with skin and eyes. Take off contaminated clothing. Eye wash facilities and emergency shower must be available when handling this product. Wash at the end of each work shift and before eating, smoking and using the toilet.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Particulate filter, type P1. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Crystalline powder. Dusty powder. Solid

Colour White/off-white.

Odour Pungent.

Odour threshold No information available.

pH pH (diluted solution): < 1 @ 5%

Melting point 177 - 315°C

Initial boiling point and range No information available.

Flash point No information available.

Evaporation rate No information available.

SODIUM HYDROGENSULPHATE

Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	1.28 - 1.50
Bulk density	No information available.
Solubility(ies)	Miscible with water.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	460°C
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No information available.
Oxidising properties	No information available.

9.2. Other information

Other information	Not available.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	120.06 g/mol
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Does not decompose when used and stored as recommended.

10.4. Conditions to avoid

Conditions to avoid Water, moisture. Keep away from heat, sparks and open flame.

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10.5. Incompatible materials

Materials to avoid Water-reactive materials. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Sulphur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg) 2,490.0

Species Rat

Skin corrosion/irritation

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

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro Negative. Ames test

Carcinogenicity

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

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

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

Inhalation Irritating to respiratory system.

Ingestion May cause stomach pain or vomiting.

Skin contact Prolonged and frequent contact may cause redness and irritation.

Eye contact Risk of serious damage to eyes.

SECTION 12: Ecological information

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

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12.1. Toxicity

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC_{50}, 96 hours: 7960 mg/l, Pimephales promelas (Fat-head Minnow)
Read-across data.

Acute toxicity - aquatic invertebrates LC_{50}, 48 hours: 1766 mg/l, Daphnia magna
Read-across data.

12.2. Persistence and degradability

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which have a photochemical ozone creation potential.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Aqueous solutions are acidic.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Waste is classified as hazardous waste.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

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Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

No information required.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information required.

SECTION 15: Regulatory information

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

EU legislation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended). 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 (as amended). Commission Regulation (EU) No 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Other information

SODIUM HYDROGENSULPHATE

Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
CAS: Chemical Abstracts Service.
DNEL: Derived No Effect Level.
IATA: International Air Transport Association.
IMDG: International Maritime Dangerous Goods.
Kow: Octanol-water partition coefficient.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
vPvB: Very Persistent and Very Bioaccumulative.
IARC: International Agency for Research on Cancer.
MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
cATpE: Converted Acute Toxicity Point Estimate.
BCF: Bioconcentration Factor.
BOD: Biochemical Oxygen Demand.
EC_{50}: 50% of maximal Effective Concentration.
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
LOEC: Lowest Observed Effect Concentration.
DMEL: Derived Minimal Effect Level.
EL50: Exposure Limit 50
hPa: Hectopascal
LL50: Lethal Loading fifty
OECD: Organisation for Economic Co-operation and Development
POW: Octanol-water partition coefficient
SCBA: self-contained breathing apparatus
STP: Sewage Treatment Plant
VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
Aquatic Acute = Hazardous to the aquatic environment (acute)
Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

04/09/2020

Version number

3.002

Supersedes date

11/08/2017

SDS number

1386

SODIUM HYDROGENSULPHATE

SDS status	Approved.
Hazard statements in full	H318 Causes serious eye damage.
Signature	Jitendra Panchal

Exposure scenario
Manufacture of substance and industrial uses

Identification

Product name	Sodium Hydrogensulphate
REACH registration number	01-2119552465-36-XXXX
CAS number	7681-38-1
EC number	231-665-7
EU index number	016-046-00-X
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Manufacture of substance and industrial uses
Product category	PC14 Metal surface treatment products PC15 Non-metal-surface treatment products. PC19 Intermediate. PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents PC21 Laboratory chemicals. PC25 Metal working fluids. PC35 Washing and cleaning products PC36 Water softeners. PC37 Water treatment chemicals.
Main sector	SU3 Industrial uses

Manufacture of substance and industrial uses

Sector of use

SU2a Mining (without offshore industries)
SU2b Offshore industries
SU4 Manufacture of food products
SU5 Manufacture of textiles, leather, fur
SU6b Manufacture of pulp, paper and paper products
SU7 Printing and reproduction of recorded media
SU8 Manufacture of bulk, large-scale chemicals (including petroleum products)
SU9 Manufacture of fine chemicals
SU10 Formulation [mixing] of preparations and/or re-packaging
SU11 Manufacture of rubber products
SU13 Manufacture of other non-metallic mineral products
SU15 Manufacture of fabricated metal products, except machinery and equipment
SU16 Manufacture of computer, electronic and optical products, electrical equipment
SU17 General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment
SU19 Building and construction work
SU20 Health services
SU23 Electricity, steam, gas, water supply and sewage treatment

Environment

Environmental release category

ERC1 Manufacture of the substance
ERC2 Formulation into mixture
ERC3 Formulation into solid matrix
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC5 Use at industrial site leading to inclusion into/onto article
ERC6a Use of intermediate
ERC6b Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC6c Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC6d Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC7 Use of functional fluid at industrial site
ERC12a Processing of articles at industrial sites with low release
ERC12b Processing of articles at industrial sites with high release

Worker

Manufacture of substance and industrial uses

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
PROC12 Use of blow agents in manufacture of foam.
PROC13 Treatment of articles by dipping and pouring.
PROC14 Tabletting, compression, extrusion, pelletisation, granulation
PROC15 Use as laboratory reagent.
PROC17 Lubrication at high energy conditions in metal working operations
PROC19 Manual activities involving hand contact
PROC21 Low energy manipulation and handling of substances bound in/on materials or articles
PROC24 High (mechanical) energy work-up of substances bound in/on materials and/or articles

2. Conditions of use affecting exposure (Industrial - Environment 1)

Environmental factors not influenced by risk management measures

Dilution Receiving surface water flow: 18000 m³/day

Risk management measures

Good practice Do not discharge into drains or watercourses or onto the ground.

STP type No STP. Onsite STP.

STP details Assumed onsite sewage treatment plant flow: 2000 m³/day

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Water Onsite wastewater treatment required. pH adjustment

Conditions and measures related to external treatment of waste for disposal

Disposal method Contain and dispose of waste according to local regulations.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).
PROC7 Industrial spraying
Covers daily exposure up to 60minutes

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Provide extract ventilation to points where emissions occur.

Manufacture of substance and industrial uses

Organisational measures to prevent/limit releases, dispersion and exposure

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Do not eat, drink or smoke when using this product. Ensure operatives are trained to minimise exposures.

Risk management measures

Wear suitable working clothes.
Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.
Filtering half-face mask (DIN EN 149)
with filter for particulates: P2.
Personal protective equipment for eye and face protection should comply with European Standard EN166.

3. Exposure estimation (Environment 1)

Risk Management Measures are based on qualitative risk characterisation. Qualitative approach used to conclude safe use.

3. Exposure estimation (Health 1)

Assessment method MEASE

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Exposure scenario
Professional use of substance or mixtures containing the substance

Identification

Product name	Sodium Hydrogensulphate
REACH registration number	01-2119552465-36-XXXX
CAS number	7681-38-1
EC number	231-665-7
EU index number	016-046-00-X
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Professional use of substance or mixtures containing the substance
Product category	PC14 Metal surface treatment products PC15 Non-metal-surface treatment products. PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents PC35 Washing and cleaning products PC37 Water treatment chemicals.
Main sector	SU22 Professional uses

Environment

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) ERC8c Widespread use leading to inclusion into/onto article (indoor) ERC8d Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor) ERC8e Widespread use of reactive processing aid (no inclusion into or onto article, outdoor) ERC8f Widespread use leading to inclusion into/onto article (outdoor) ERC9a Widespread use of functional fluid (indoor) ERC9b Widespread use of functional fluid (outdoor) ERC10a Widespread use of articles with low release (outdoor) ERC10b Widespread use of articles with high or intended release (outdoor) ERC11a Widespread use of articles with low release (indoor) ERC11b Widespread use of articles with high or intended release (indoor)

Worker

Professional use of substance or mixtures containing the substance

Process category

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
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
PROC12 Use of blow agents in manufacture of foam.
PROC13 Treatment of articles by dipping and pouring.
PROC14 Tabletting, compression, extrusion, pelletisation, granulation
PROC15 Use as laboratory reagent.
PROC17 Lubrication at high energy conditions in metal working operations
PROC19 Manual activities involving hand contact
PROC21 Low energy manipulation and handling of substances bound in/on materials or articles
PROC24 High (mechanical) energy work-up of substances bound in/on materials and/or articles

2. Conditions of use affecting exposure (Industrial - Environment 1)

Environmental factors not influenced by risk management measures

Dilution Receiving surface water flow: 18000 m³/day

Risk management measures

Good practice Do not discharge into drains or watercourses or onto the ground.

STP type No STP. Onsite STP.

STP details Assumed onsite sewage treatment plant flow: 2000 m³/day

Technical onsite conditions and measures to reduce or limit discharges to air, water and soil

Water Onsite wastewater treatment required. pH adjustment

Conditions and measures related to external treatment of waste for disposal

Disposal method Contain and dispose of waste according to local regulations.

2. Conditions of use affecting exposure (Workers - Health 1)

Product characteristics

Concentration details Covers concentrations up to 100 %.

Frequency and duration of use

Covers daily exposures up to 8 hours (unless stated differently).
PROC11 Non industrial spraying
Covers daily exposure up to 60minutes

Technical conditions and measures at process level (source) to prevent release

Technical protective measures Provide extract ventilation to points where emissions occur.

Organisational measures to prevent/limit releases, dispersion and exposure

Professional use of substance or mixtures containing the substance

Organisational measures Assumes a good basic standard of occupational hygiene is implemented. Do not eat, drink or smoke when using this product. Ensure operatives are trained to minimise exposures.

Risk management measures

Wear suitable working clothes.
Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent/minimise exposures and to report any skin problems that may develop.
Filtering half-face mask (DIN EN 149)
with filter for particulates: P2.
Personal protective equipment for eye and face protection should comply with European Standard EN166.

3. Exposure estimation (Environment 1)

Risk Management Measures are based on qualitative risk characterisation. Qualitative approach used to conclude safe use.

3. Exposure estimation (Health 1)

Assessment method MEASE

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented.

Exposure scenario
Consumer Use in Cleaning Agents

Identification

Product name	Sodium Hydrogensulphate
REACH registration number	01-2119552465-36-XXXX
CAS number	7681-38-1
EC number	231-665-7
EU index number	016-046-00-X
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Consumer Use in Cleaning Agents
Product category	PC35 Washing and cleaning products
Main sector	SU21 Consumer uses

Environment

Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100 Receiving surface water flow: 18000 m³/day

Risk management measures

STP type	Municipal STP.
STP details	Assumed domestic sewage treatment plant flow: 2000 m³/day

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Solid , or: Liquid

Consumer Use in Cleaning Agents

Concentration details	Surface cleaners (liquid, powder, gel neat, spray neat) for consumer use Concentration of substance in product: 10% Toilet rim cleaners (solid) Concentration of substance in product: 80%

Amounts used

Surface cleaners (liquid, powder, gel neat, spray neat) for consumer use
Amount per use: 22 g
Toilet rim cleaners (solid)
Amount per use: 30 g

Frequency and duration of use

Covers daily exposure up to 20minutes

Human factors not influenced by risk management

Potentially exposed body parts	Both hands. Covers skin contact area up to 857.5 cm².

Other given operational conditions affecting Non-industrial exposure

Setting	Indoor/outdoor use.
Temperature	Assumes activities are at ambient temperature (unless stated differently).

Other given operational conditions affecting Non-industrial exposure

Consumer information	Avoid contact with skin, eyes and clothing. Keep container tightly closed. Keep out of the reach of children. Wash hands thoroughly after handling.

3. Exposure estimation (Environment 1)

Risk Management Measures are based on qualitative risk characterisation. Qualitative approach used to conclude safe use.

3. Exposure estimation (Health 1)

Qualitative approach used to conclude safe use.

Exposure scenario
Consumer use as pH-regulator

Identification

Product name	Sodium Hydrogensulphate
REACH registration number	01-2119552465-36-XXXX
CAS number	7681-38-1
EC number	231-665-7
EU index number	016-046-00-X
Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com

1. Title of exposure scenario

Main title	Consumer use as pH-regulator
Product category	PC35 Washing and cleaning products
Main sector	SU21 Consumer uses

Environment

Environmental release category	ERC8a Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)

2. Conditions of use affecting exposure (Non-industrial - Environment 1)

Environmental factors not influenced by risk management measures

Dilution	Local freshwater dilution factor: 10 Local marine water dilution factor: 100 Receiving surface water flow: 18000 m³/day

Risk management measures

STP type	Municipal STP.
STP details	Assumed domestic sewage treatment plant flow: 2000 m³/day

2. Conditions of use affecting exposure (Non-industrial - Health 1)

Product characteristics

Physical state	Solid , or: Liquid
Concentration details	Solid Concentration of substance in product: 100% Liquid Concentration of substance in product: 50%

Consumer use as pH-regulator

Frequency and duration of use

Solid
Covers daily exposure up to 1.33minutes
Liquid
Covers frequency up to 1 day/month, , .

Human factors not influenced by risk management

Potentially exposed body parts	Solid Palm of both hands. Covers skin contact area up to 430 cm². Liquid Both hands. Covers skin contact area up to 860 cm².

Other given operational conditions affecting Non-industrial exposure

Setting	Indoor/outdoor use.
Temperature	Assumes activities are at ambient temperature (unless stated differently).

Other given operational conditions affecting Non-industrial exposure

Consumer information	Avoid contact with skin, eyes and clothing. Keep container tightly closed. Keep out of the reach of children. Wash hands thoroughly after handling.

3. Exposure estimation (Environment 1)

Risk Management Measures are based on qualitative risk characterisation. Qualitative approach used to conclude safe use.

3. Exposure estimation (Health 1)

Qualitative approach used to conclude safe use.