

Issue Date 21-Feb-2006

Revision Date 14-Feb-2023

Version 3

SAFETY DATA SHEET

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Code(s)	1436369			
Product Name	Dechlorinating Reagent			
Molecular weight	Not applicable			
1.2. Relevant identified uses of the s	substance or mixture and uses advised against			
Recommended Use	Dechlorinating reagent. Water Analysis.			
Uses advised against	Consumer use			
1.3. Details of the supplier of the saf	ety data sheet			
Supplier				

Supplier HACH UK Laser House Ground Floor, Suite B Waterfront Quay, Salford Quays GB - Manchester, M50 3XW Tel. +44 (0) 161 872 1487 info-uk@hach.com

HACH Ireland Unit 34 GB Business Park Little Island IRL-Co. Cork T45 H681 Tel. +353 (0)146 02 522 info-ie@hach.com

1.4. Emergency telephone number

UK: Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service IE: National Poisons Information Centre (NPIC) 01 809 2566 (24/7)

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

Hazard statements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

Harmful to aquatic life.

PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT) This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	CAS No. EC No. Index No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Sodium sulfate	7757-82-6 231-820-9 -	90 - 100%	Not classified	-	-	-
Sodium thiosulfate	7772-98-7 231-867-5 -	<10%	Not classified	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate No information available

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	Take off contaminated clothing and shoes immediately. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. If symptoms persist, call a doctor.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a doctor.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a doctor.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person.

Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
4.2. Most important symptoms and	effects, both acute and delayed
Symptoms	No information available.
4.3. Indication of any immediate me	edical attention and special treatment needed
Note to doctors	Treat symptomatically.
	Section 5: FIREFIGHTING MEASURES
5.1. Extinguishing media	
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Product itself does not burn.
Unsuitable extinguishing media	No information available.
5.2. Special hazards arising from the	ne substance or mixture
Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapours.
5.3. Advice for firefighters	
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
Additional information	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Sec	tion 6: ACCIDENTAL RELEASE MEASURES
6.1. Personal precautions, protection	ve equipment and emergency procedures
Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See

For emergency responders	Use personal protection recommended in Section 8.		
6.2. Environmental precautions			
Environmental precautions	Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.		
6.3. Methods and material for containment and cleaning up			
Methods for containment	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).		
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.		
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.		

section 8 for more information.

6.4. Reference to other sections

See section 8 for more information. See section 13 for more information. **Reference to other sections**

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapours/spray.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.
7.3. Specific end use(s)	

Specific use(s)	Analytical reagent.
Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters This product, as supplied, does not contain any hazardous materials with occupational **Exposure Limits** exposure limits established by the region specific regulatory bodies No information available. **Derived No Effect Level (DNEL) Predicted No Effect Concentration** No information available. (PNEC) No information available. Additional information 8.2. Exposure controls **Engineering controls** Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Personal protective equipment Eye/face protection Wear safety glasses with side shields (or goggles). Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves Hand protection must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374-1:2016 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III acco. Avoid contact with eyes, skin and clothing. Skin and body protection

Respiratory protection	Ensure adequate ventilation.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands before breaks and after work.
Environmental exposure controls	Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Solid

Colour white

Odour Odourless

Odour threshold Not applicable

Property	Values	Remarks • Method
Molecular weight	Not applicable	
рН	6.5	5% @ 20°C
Melting point / freezing point	48 °C / 118.4 °F	
Initial boiling point and boiling range	No data available	
Evaporation rate	Not applicable	
Vapour pressure	Not applicable	
Relative vapor density	No data available	
Specific Gravity	1.2547	
Partition coefficient	log Kow ~ -2.78	
Soil Organic Carbon-Water Partition Coefficient	log K _{oc} ~ -1.3	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	Not applicable	
Kinematic viscosity Relative density	Not applicable 1.2547 g/cm ³	@ 20 °C

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
	No information available	No data available	No information available
Metal Corrosivity			
Steel Corrosion Rate Aluminum Corrosion Rate		Not applicable Not applicable	
Explosive properties			
Upper explosion limit Lower explosion limit		No data available No data available	
Flammable properties			
Flash point		Not applicable	
Flammability			
Upper flammability limit: Lower flammability limit		No data available No data available	
Oxidising properties		No data available.	
Bulk density		No data available	
9.2. Other information			
No information available.			
	Section 10: STABILI	TY AND REACTIVITY	
10.1. Reactivity			
Reactivity	No information available.		
10.2. Chemical stability			
Stability	Stable under normal conditions.		
10.3. Possibility of hazardous reactions			
Possibility of hazardous reactions	None under normal proce	ssing.	
10.4. Conditions to avoid			

Conditions to avoid Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

Section 11: TOXICOLOGICAL INFORMATION

Version 3

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met

No data available. Mixture

Substance No data available.

Acute Toxicity Estimate (ATE)

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

Skin corrosion/irritation

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

Mixture No data available.

Substance

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium sulfate	Draize Test	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA
Sodium thiosulfate	OECD Test 404: Acute Dermal Corrosion/Irritation	Rabbit	500 mg	4 hours	Not corrosive or irritating to skin	ECHA

<u>Serious eye damage/eye irritation</u> Based on available data, the classification criteria are not met.

Mixture

No data available.

Substance

Test data reported below.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium sulfate	Draize Test	Rabbit	90 mg	24 hours	Not corrosive or irritating to eyes	ECHA
Sodium thiosulfate	OECD Test 405: Acute Eye Corrosion/Irritation	Rabbit	75 mg	None reported	Not corrosive or irritating to eyes	ECHA

Respiratory or skin sensitisation

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

No data available. Mixture

Substance Test data reported below.

Skin Sensitization Exposure Route:

Chemical name	Test method	Species	Results	Key literature references and sources for data
Sodium sulfate	OECD Test No.	Guinea pig	No sensitisation responses were	HSDB

406: Skin	observed.	
Sensitisation		

STOT - single exposure

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

Mixture	No data available.			
Substance	No data available.			
STOT - repeated exposure Based on available data, the classification	ation criteria are not met.			
Mixture	No data available.			
Substance	No data available.			
Germ cell mutagenicity Based on available data, the classifica	ation criteria are not met.			
Mixture invitro Data	No data available.			
Substance invitro Data	No data available.			
Mixture invivo Data	No data available.			
Substance invivo Data	No data available.			
<u>Carcinogenicity</u> Based on available data, the classifica	ation criteria are not met.			
Mixture	No data available.			
Substance	No data available.			
Reproductive toxicity Based on available data, the classification criteria are not met.				
Mixture	No data available.			

Substance Test data reported below.

Oral Exposure Route:

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium sulfate	Mouse TD⊾	14000 mg/kg	4 days	Effects on Newborn Other neonatal measures or effects	RTECS

Aspiration hazard

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

11.2 Information on other hazards

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information Other adverse effects

No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity	Based on available data, the classification criteria are not met.			
Unknown aquatic toxicity	Contains 0 % of components with unknown hazards to the aquatic environment.			
<u>Mixture</u>				
Acute aquatic toxicity:	No data available.			
Aquatic Chronic Toxicity:	No data available.			
Substance				
Acute aquatic toxicity:	Test data reported below.			

Fish:

Chemical name	Exposure	Species	Endpoint type	Reported dose	Key literature references and
	time				sources for data
Sodium sulfate	96 hours	None reported	LC ₅₀	56 mg/L	IUCLID
Sodium thiosulfate	96 hours	Gambusia affinis	LC50	24000 mg/L	IUCLID

Crustacea:

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium sulfate	48 Hours	Daphnia magna	EC ₅₀	3150 mg/L	IUCLID

Aquatic Chronic Toxicity: No data available.

12.2. Persistence and degradability

Mixture	No data available.
12.3. Bioaccumulative potential	
Mixture:	No data available.
Partition coefficient	log Kow ~ -2.78
<u>12.4. Mobility in soil</u>	

Soil Organic Carbon-Water Partition	log K₀c ~ -1.3
Coefficient	U

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Endocrine disrupting properties

Endocrine Disruptor Information: This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

No information available.

Ozone:

Not applicable

Ozone depletion potential (ODP): No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Advice on Disposal

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.			
Waste disposal number of waste fr	om residues/unused products			
160506	WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste.			
Waste disposal number of used product				
160506	WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste.			
Contaminated packaging	Dispose of contents/containers in accordance with local regulations.			
Other Information	Do not reuse empty containers.			

Section 14: TRANSPORT INFORMATION

IMDG

INIDG	
14.1 UN number or ID number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Marine pollutant	Not applicable
14.6 Special precautions for user	See section 6-8 for more information
14.7. Transport in bulk according to	Not applicable
Annex II of MARPOL and the IBC	
Code	
ADR	
14.1 UN number or ID number	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	See section 6-8 for more information
14.0 Special precautions for user	
ΙΑΤΑ	Not regulated
14.1 UN number or ID number	-
	Not regulated
14.2 Proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	See section 6-8 for more information

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

Section 15: REGULATORY INFORMATION

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

European Union

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

Non-controlled

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

Germany

Water hazard class (WGK)

slightly hazardous to water (WGK 1)

EINECS/ELINCS Com	plies
EINECS/ELINCS COM	
TSCA Com	plies
DSL/NDSL Com	plies
ENCS Com	plies
IECSC Com	plies
KECL - Existing substances Com	plies
PICCS Com	plies
AICS Com	plies

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

Chemical safety assessments for substances in this mixture were not carried out.

Section 16: OTHER INFORMATION				
Issue Date	21-Feb-2006			
Revision Date	14-Feb-2023			
Revision Note	New SDS, SDS sections updated, 3, 9, 11, 12.			
Key or legend to abbreviations and acronyms used in the safety data sheet				
Legend				
**	Hazard Designation			
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieure			
ADR ATE	European Agreement concerning the International Carriage of Dangerous Goods by Road Acute Toxicity Estimate			
CAS	Chemical Abstracts Service Number			
Ceiling	Maximum limit value			
CLP	Classification, Labelling and Packaging of substances and mixtures [Regulation (EC) No. 1272/2008]			
DNEL	Derived No Effect Level (DNEL)			
EC	European Community			
ECHA	ECHA (The European Chemicals Agency)			
EC50 EEC	Effective Concentration to 50% of a test population			
EEC	European Economic Community European Standard			
IMDG	International Maritime Dangerous Goods (IMDG)			
IATA	International Air Transport Association (IATA)			
IATA-DGR	International Air Transport Association - Dangerous Goods Regulations			
ICAO	International Civil Aviation Organization			
ICAO-TI	International Civil Aviation Organization - Technical Instructions			
IUCLID	IUCLID (The International Uniform Chemical Information Database)			
GHS	Globally Harmonized System of Classification and Labelling of Chemicals			
LOAEL	Lowest observed adverse effect level			
LOAEC	Lowest observed adverse effect concentration			
LC50	Lethal Concentration to 50% of a test population			
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)			
LOLI	LOLI (List of Lists - An International Chemical Regulatory Database)			
MAK	Maximale Arbeitsplatz-Konzentration, a German expression corresponding to threshold limit			
NOAEL	value, which relates to safe daily exposure levels to chemical substances NOAEL (No observed adverse effect level)			
NOAEC	No observed adverse effect concentration			
OSHA	OSHA (Occupational Safety and Health Administration of the US Department of Labour)			
PEC	Predicted Effect Concentration			
PNEC	Predicted No Effect Concentration (PNEC)			
PBT	Persistent, Bioaccumulative, and Toxic (PBT) Chemicals			
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals [Regulation (EC) No. 1907/2006])			
RID	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)			
RTECS	RTECS (Registry of Toxic Effects of Chemical Substances)			
TWA	TWA (time-weighted average)			
SKN*	Skin designation			
SKN+	Skin sensitisation			

STEL STOT STOT RE STOT SE SVHC TLV TRGS TSCA UN VPVB VOC	STEL (Short Term Exposure Limit) Specific Target Organ Toxicity Specific target organ toxicity — repeated exposure Specific target organ toxicity — single exposure Substances of Very High Concern Threshold Limit Value Technical rules for hazardous substances, Germany Toxic Substances Control Act United Nations very persistent and very bioaccumulative Volatile organic compounds
vPvB	
VOC	Volatile organic compounds
AwSV	Administrative regulation of water polluting substances, Germany

Key literature references and sources for data

See Section 11: TOXICOLOGICAL INFORMATION See Section 12: ECOLOGICAL INFORMATION

Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration toxicity	Calculation method
Ozone	Calculation method

Training Advice

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Restrictions on use

For Laboratory Use Only.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

End of Safety Data Sheet