

Safety Data Sheet

according to UK REACH Regulation

Reagent 130+R1191

Revision date: 11.01.2023 Product code: 130+R1191 Page 1 of 11

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

1.1. Product identifier

Reagent 130+R1191

UFI: 32N7-5RDW-N30J-EFS0

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

Use of the substance/mixture

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Laboratory chemicals

Uses advised against

Do not use for private purposes (household).

1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH Street: Stempelstraße 6 Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

e-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

e-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

Further Information

inapplicable, this product is a mixture REACH registration number see section 3

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318 Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

sodium hydroxide

sodium hypochlorite, solution **Signal word:**Danger

Pictograms:







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Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

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.

Special labelling of certain mixtures

EUH031 Contact with acids liberates toxic gas.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (GB CLP Regulation				
1310-73-2	sodium hydroxide				
	215-185-5	011-002-00-6	01-2119457892-27		
	Met. Corr. 1, Skin Corr. 1A; H290 H314				
7681-52-9	sodium hypochlorite, solution			1 - < 5 %	
	231-668-3	017-011-00-1	01-2119488154-34		
	Met. Corr. 1, Skin Corr. 1B, Eye Dam. 1, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H290 H314 H318 H335 H400 H410 EUH031				

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity		
	Specific Conc.	Limits, M-factors and ATE			
1310-73-2	215-185-5	sodium hydroxide	5 - < 10 %		
	Skin Corr. 1A; H314: >= 5 - 100 Skin Corr. 1B; H314: >= 2 - < 5 Skin Irrit. 2; H315: >= 0,5 - < 2 Eye Irrit. 2; H319: >= 0,5 - < 2				
7681-52-9	231-668-3	sodium hypochlorite, solution	1 - < 5 %		
	mg/kg Aquatio	:0 = > 10,5 mg/l (vapours); dermal: LD50 = > 20000 mg/kg; oral: LD50 = 1100 : Acute 1; H400: M=10 ::1; H410: M=1			

Further Information

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

SECTION 4: First aid measures



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4.1. Description of first aid measures

General information

No data available

After inhalation

Provide fresh air.

Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

Rinse mouth immediately and drink plenty of water.

Call a physician immediately.

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

Causes burns.

Irritant

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Hydrogen chloride (HCI)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

In case of fire and/or explosion do not breathe fumes.

Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Move undamaged containers from immediate hazard area if it can be done safely.

Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Corrosive to metals.

For non-emergency personnel

Provide adequate ventilation.



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Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Use personal protection equipment.

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Corrosive to metals.

Unsuitable container/equipment material: Metal

Keep container tightly closed.



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Hints on joint storage

national regulations

Further information on storage conditions

storage temperature: <= +8°C Protect against: Light, Heat

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance				
DNEL type		Exposure route	Effect	Value	
1310-73-2	sodium hydroxide				
Worker DNEL,	long-term	inhalation	local	1 mg/m³	
Consumer DNE	EL, long-term	inhalation	local	1 mg/m³	
7681-52-9	sodium hypochlorite, solution				
Worker DNEL,	long-term	inhalation	systemic	1,55 mg/m³	
Worker DNEL,	acute	inhalation	systemic	3,1 mg/m³	
Worker DNEL,	long-term	inhalation	local	1,55 mg/m³	
Worker DNEL,	acute	inhalation	local	3,1 mg/m³	
Worker DNEL,	long-term	dermal	local	0,5 %	
Consumer DNE	EL, long-term	inhalation	systemic	1,55 mg/m³	
Consumer DNE	EL, acute	inhalation	systemic	3,1 mg/m³	
Consumer DNE	EL, long-term	inhalation	local	1,55 mg/m³	
Consumer DNEL, acute		inhalation	local	3,1 mg/m³	
Consumer DNEL, long-term		dermal	local	0,5 %	
Consumer DNE	EL, long-term	oral	systemic	0,26 mg/kg bw/day	

PNEC values

CAS No	Substance		
Environmental compartment Value		Value	
7681-52-9 sodium hypochlorite, solution			
Freshwater 0,00021 mg/l		0,00021 mg/l	
Freshwater (intermittent releases) 0,00026 mg/l		0,00026 mg/l	
Marine water		0,000042 mg/l	
Secondary poisoning 11		11,1 mg/kg	
Micro-organisms in sewage treatment plants (STP) 4,69 mg/l		4,69 mg/l	

8.2. Exposure controls



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Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Wear eye/face protection.

Hand protection

Suitable examples are gloves of KCL GmbH, D-36124 Eichenzell, e-mail: vertrieb@kcl.de with the following specification (test according to EN 374):

By long-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min

By short-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour:

Odour: characteristic
Odour threshold: No data available

Melting point/freezing point:

Boiling point or initial boiling point and

No data available

No data available

boiling range: Flammability

Solid/liquid:
Gas:
No data available
Lower explosion limits:
No data available
Upper explosion limits:
No data available
Flash point:
No data available
Auto-ignition temperature:
No data available
Decomposition temperature:
No data available



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pH-Value: 13,5

Viscosity / kinematic:

Water solubility:

No data available completely miscible

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

Vapour pressure:

Vapour pressure:

No data available

Vapour pressure:

No data available

Density:

1,1 g/cm³

Bulk density:

No data available

Relative vapour density:

No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

No data available

Sustaining combustion: No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties Oxidizing

Other safety characteristics

Evaporation rate:

Solvent separation test:

Solvent content:

Solid content:

No data available

No data available

0

0

Sublimation point:

Softening point:

No data available

No data available

No data available

No data available

No data available:

Viscosity / dynamic:

No data available

No data available

Further Information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals.

10.2. Chemical stability

storage temperature: <= +8°C Protect against: Light, Heat

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Light

Heat / Radiant heat.

10.5. Incompatible materials

Metal

10.6. Hazardous decomposition products

In case of fire may be liberated:



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SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Acute toxicity

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

CAS No	Chemical name							
	Exposure route	Dose		Species	Source	Method		
7681-52-9	sodium hypochlorite, solu	ution						
	oral	LD50 mg/kg	1100	Rat	Study report (1981)	OECD Guideline 401		
	dermal	LD50 mg/kg	> 20000	Rabbit	Study report (1978)	OECD Guideline 402		
	inhalation (1 h) vapour	LC50 mg/l	> 10,5	Rat	Study report (1962)	OECD Guideline 403		

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes serious eye damage.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Information on likely routes of exposure

There are no data available on the preparation/mixture itself.

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

Additional information on tests

There are no data available on the preparation/mixture itself.

Practical experience

There are no data available on the preparation/mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

Other information

There are no data available on the preparation/mixture itself.

Further information

There are no data available on the preparation/mixture itself.



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SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the preparation/mixture itself.

CAS No	Chemical name						
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method
1310-73-2	sodium hydroxide						
	Acute crustacea toxicity	EC50 mg/l	40,4	48 h	Ceriodaphnia sp.	Ecotoxicology and Environmental Safety,4	other: acute 48-h immobilization test ac
7681-52-9	sodium hypochlorite, solu	tion					
	Acute fish toxicity	LC50 mg/l	0,05	96 h	different fish species	Publication (1978)	Public available literature. No guidelin
	Acute algae toxicity	ErC50 mg/l	0,036	72 h	Pseudokirchneriella subcapitata	Study report (2013)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	0,141	48 h	Daphnia magna	Study report (2009)	OECD Guideline 202
	Fish toxicity	NOEC mg/l	0,062	15 d	Brevoortia tyrannus	Publication (1980)	Organisms were exposed to cooling waters
	Crustacea toxicity	NOEC mg/l	0,015	21 d	V. iris	Environmental Toxicology and Chemistry,	21 d long-term toxicity to mussel test.
	Acute bacteria toxicity	(EC50 mg/l)	563	3 h	activated sludge of a predominantly domestic sewag	Study report (2013)	OECD Guideline 209

12.2. Persistence and degradability

There are no data available on the preparation/mixture itself.

12.3. Bioaccumulative potential

There are no data available on the preparation/mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7681-52-9	sodium hypochlorite, solution	-3,42

12.4. Mobility in soil

There are no data available on the preparation/mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Discharge into the environment must be avoided.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods



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Disposal recommendations

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Send to a physico-chemical treatment facility under observation of official regulations.

Do not empty into drains.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

SECTION 14: Transport information

Land	tran	sport	/AD	D/DI	D١
Land	trans	SDOIL	IAD	K/KI	וט

14.1. UN number or ID number: UN 3266

14.2. UN proper shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide)

14.3. Transport hazard class(es): 14.4. Packing group: П Hazard label: 8 Classification code: C5 **Special Provisions:** 274 Limited quantity: 1 L E2 Excepted quantity: Transport category: 2 Hazard No: 80 Tunnel restriction code: F

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3266

14.2. UN proper shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Classification code:C5Special Provisions:274Limited quantity:1 LExcepted quantity:E2

Marine transport (IMDG)

14.1. UN number or ID number: UN 3266

14.2. UN proper shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:274Limited quantity:1 LExcepted quantity:E2EmS:F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3266

14.2. UN proper shipping name: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (sodium hydroxide)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:A3 A803Limited quantity Passenger:0.5 LPassenger LQ:Y840Excepted quantity:E2



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IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-max. quantity - Cargo:30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

Danger releasing substance: sodium hypochlorite, solution

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 9,11,12.

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure	
Met. Corr. 1; H290	On basis of test data	
Skin Corr. 1A; H314	Calculation method	
Eye Dam. 1; H318	Calculation method	
Aquatic Chronic 1; H410		

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H335 May cause respiratory irritation. H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH031 Contact with acids liberates toxic gas.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)