

according to UK REACH Regulation

NDF solution

Revision date: 22.11.2022 Product code: N651 Page 1 of 9

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

1.1. Product identifier

NDF solution

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

1.3. Details of the supplier of the safety data sheet

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Repr. 1B; H360FD

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Sodium dodecyl sulfate

disodium tetraborate decahydrate; borax decahydrate

Signal word: Danger

Pictograms:



Hazard statements

H360FD May damage fertility. May damage the unborn child.

Precautionary statements

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

protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



according to UK REACH Regulation

NDF solution Product code: N651

Revision date: 22.11.2022 Product code: N651 Page 2 of 9

Hazardous components

CAS No	Chemical name	emical name			
	EC No	Index No	REACH No		
	Classification (GB CLP Regulation)				
151-21-3	Sodium dodecyl sulfate			1 - < 5 %	
	205-788-1				
	Flam. Sol. 2, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, Aquatic Chronic 3; H228 H332 H302 H315 H318 H335 H412				
6381-92-6	EDTA-Disodium Salt Dihrydrate				
	205-358-3				
	Acute Tox. 4, STOT RE 2; H332 H3				
1303-96-4	disodium tetraborate decahydrate; borax decahydrate				
	215-540-4	005-011-00-4			
Repr. 1B; H360FD					

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. I	Limits, M-factors and ATE	
151-21-3	205-788-1 Sodium dodecyl sulfate		1 - < 5 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 1288 mg/kg		
6381-92-6	205-358-3	EDTA-Disodium Salt Dihrydrate	1 - < 5 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: LD50 = 2800 mg/kg		
1303-96-4	215-540-4	disodium tetraborate decahydrate; borax decahydrate	< 1 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2660 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

Wash with plenty of water. Immediately remove any contaminated clothing, shoes or stockings. Medical treatment necessary.

After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Consult an ophthalmologist.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

No information available.

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

Treat symptomatically.



according to UK REACH Regulation

NDF solution

Revision date: 22.11.2022 Product code: N651 Page 3 of 9

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

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

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

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 cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

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, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

storage temperature: at room temperature



according to UK REACH Regulation

NDF solution

Product code: N651 Revision date: 22.11.2022 Page 4 of 9

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
1303-96-4	Disodium tetraborate, decahydrate	-	5		TWA (8 h)	WEL

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid Colour: colourless Odour: odourless

Melting point/freezing point: not determined Boiling point or initial boiling point and 100 °C

boiling range: Flammability

Solid/liquid: not applicable Gas: not applicable Lower explosion limits: not determined Upper explosion limits: not determined Flash point: 200 °C Auto-ignition temperature: not determined Decomposition temperature: not determined pH-Value (at 20 °C):

Water solubility: easily soluble

Solubility in other solvents not determined



Print date: 22.11.2022

according to UK REACH Regulation

NDF solution

Revision date: 22.11.2022 Product code: N651 Page 5 of 9

Partition coefficient n-octanol/water: not determined Vapour pressure: 23 hPa

(at 20 °C)

Density (at 20 °C): 1,016 g/cm³
Relative vapour density: not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate: not determined Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

ATEmix calculated

ATE (oral) 42933,3 mg/kg; ATE (inhalation vapour) 224,49 mg/l; ATE (inhalation dust/mist) 30,612 mg/l



according to UK REACH Regulation

NDF solution Revision date: 22.11.2022 Product code: N651 Page 6 of 9

Acute toxicity

CAS No	Chemical name						
	Exposure route	Dose		Species	Source	Method	
151-21-3	Sodium dodecyl sulfate						
	oral	LD50 mg/kg	1288	Rat			
	inhalation vapour	ATE	11 mg/l				
	inhalation dust/mist	ATE	1,5 mg/l				
6381-92-6	EDTA-Disodium Salt Dihrydrate						
	oral	LD50 mg/kg	2800	Rat			
	inhalation vapour	ATE	11 mg/l				
	inhalation dust/mist	ATE	1,5 mg/l				
1303-96-4	disodium tetraborate decahydrate; borax decahydrate						
	oral	LD50 mg/kg	2660	Rat			
	dermal	LD50 mg/kg	> 2000	Rabbit			

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

- 1110 р	The product is not. Ecotoxic.							
CAS No	Chemical name							
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method		
6381-92-6	EDTA-Disodium Salt Dihry	EDTA-Disodium Salt Dihrydrate						
	Acute crustacea toxicity	EC50 >100 mg/l	48 h	Daphnia magna (Big water flea)				
1303-96-4	disodium tetraborate decahydrate; borax decahydrate							
	Acute crustacea toxicity	EC50 1085- 1402 mg/l	48 h	Daphnia magna (Big water flea)				

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

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

The product has not been tested.

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.

Further information

Avoid release to the environment.



according to UK REACH Regulation

NDF solution

Revision date: 22.11.2022 Product code: N651 Page 7 of 9

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land	transport	/ADD/DID/
Land	transport	(AUR/RIU)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:No dangerous good in sense of this transport regulation.14.2. UN proper shipping name:No dangerous good in sense of this transport regulation.14.3. Transport hazard class(es):No dangerous good in sense of this transport regulation.14.4. Packing group:No dangerous good in sense of this transport regulation.

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

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59): disodium tetraborate decahydrate; borax decahydrate

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 30, Entry 40, Entry 75

Information according to 2012/18/EU Not subject to 2012/18/EU (SEVESO III) (SEVESO III):

Additional information

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline'



according to UK REACH Regulation

NDF solution

Revision date: 22.11.2022 Product code: N651 Page 8 of 9

(94/33/EC).

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or

nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate LC50: Lethal concentration, 50%

LD50: Lethal dose, 50% LL50: Lethal loading, 50% EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation

intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules MFAG: Medical First Aid Guide

IATA: International Air Transport Association ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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

Classification	Classification procedure
Repr. 1B; H360FD	Calculation method

Relevant H and EUH statements (number and full text)

H228 Flammable solid.





according to UK REACH Regulation

NDF solution						
Revision date: 22.11.2022	Product code: N651	Page 9 of 9				
H302	Harmful if swallowed.					
H315	Causes skin irritation.					
H318	Causes serious eye damage.					
H332	Harmful if inhaled.					
H335	May cause respiratory irritation.					
H360FD	May damage fertility. May damage the unborn child.					
H373	May cause damage to organs through prolonged or repeated exposure.					
H412	Harmful to aquatic life with long lasting effects.					
Further Information						
product properties ar	ased on the present level of our knowledge. It does not, however, give assurance of and establishes no contract legal rights. The receiver of our product is singularly responsible ang laws and regulations.					

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