

## Safety Data Sheet

# DNS reagent

Version : V2.0.0.1

Report No. : BWZ6105-2016-MSDS-EP

Creation Date : 2025/12/14

Revision Date : -



\*Prepared in accordance with EU REACH Regulation (REACH 1907/2006 with amendment 2020/878)

## 1 Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Product Name	DNS reagent
Cat No.	BWZ6105-2016
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable
REACH Registration Number	-
UFI	No information available

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

Relevant identified uses	Please consult manufacturer.
Uses advised against	Please consult manufacturer.

### 1.3 Details of the supplier of the Safety Data Sheet

Name of the company	Weiyel Inc
Address of the company	Hedian Light Industrial Park, Chengguan Town, Shangcheng County, Xinyang City, Henan Province, China
Post code	465350
Telephone number	010-58103678
Fax number	010-84840368
E-mail address	info@weiyel.com

### 1.4 Emergency telephone number

Emergency telephone number	010-58103678
Opening hours	24h

## 2 Hazards identification

### 2.1 CLP classification according to Regulation ( EC ) No. 1272/2008 with amendment 2023/707

Skin corrosion/irritation	Category 1B
Serious eye damage/irritation	Category 1

### 2.2 Label elements

Hazard pictograms	
Signal word	<b>Danger</b>

### Hazard statements

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

### Precautionary statements

#### ◆ Prevention

P260	Do not breathe gas/mist/vapour/spray.
P264	Wash hands and other parts of the body (if related) thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

#### ◆ Response

P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see related instructions on the label).
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas 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.

#### ◆ Storage

P405	Store locked up.
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#### ◆ Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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### 2.3 Other hazards

#### ◆ Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Water	Insufficient information, temporarily unable to evaluate
Butanedioic acid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	Insufficient information, temporarily unable to evaluate
Sodium hydroxide	Not applicable
3,5-dinitrosalicylic acid	Insufficient information, temporarily unable to evaluate
Phenol	Not PBT/vPvB
Sodium sulphite	Not applicable

#### ◆ Results of endocrine disrupting properties assessment

Component	Results of endocrine disrupting properties assessment [according to (EU) No 2017/2100 or (EU) No 2018/605]
Water	Insufficient information, temporarily unable to evaluate
Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	Insufficient information, temporarily unable to evaluate
Sodium hydroxide	Insufficient information, temporarily unable to evaluate
3,5-dinitrosalicylic acid	Insufficient information, temporarily unable to evaluate
Phenol	Insufficient information, temporarily unable to evaluate
Sodium sulphite	Insufficient information, temporarily unable to evaluate

◆ Other

Not applicable.

### 3 Composition/information on ingredients

#### 3.1 Substance/mixture

Mixture

Component	Weight % content(or range)	Classification according to Regulation ( EC ) No. 1272/2008 with amendment 2023/707 [CLP]	Specific Conc. Limits, M-factors
<b>Water</b> CAS : 7732-18-5 EC : 231-791-2 Index No. : -	88.085	Not Classified	-
<b>Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)</b> CAS : 6381-59-5 EC : 613-385-0 Index No. : -	9.10	Not Classified	-
<b>Sodium hydroxide</b> CAS : 1310-73-2 EC : 215-185-5 Index No. : 011-002-00-6	2.00	Skin corrosion/irritation, Category 1A, H314	H314A:C ≥ 5% H314B:2% ≤ C < 5% H315:0.5% ≤ C < 2% H319:0.5% ≤ C < 2%
<b>3,5-dinitrosalicylic acid</b> CAS : 609-99-4 EC : 210-204-3 Index No. : -	0.315	Acute Toxicity - Oral, Category 4, H302; Serious eye damage/irritation, Category 1, H318	-
<b>Phenol</b> CAS : 108-95-2 EC : 203-632-7 Index No. : 604-001-00-2	0.25	Acute Toxicity - Oral, Category 3, H301; Acute Toxicity - Dermal, Category 3, H311; Skin corrosion/irritation, Category 1B, H314; Acute Toxicity - Inhalation, Category 3, H331; Germ cell mutagenicity, Category 2, H341; Specific target organ toxicity - repeated exposure, Category 2, H373	H314B:C ≥ 3% H315:1% ≤ C < 3% H319:1% ≤ C < 3%
<b>Sodium sulphite</b> CAS : 7757-83-7 EC : 231-821-4 Index No. : -	0.25	Skin corrosion/irritation, Category 1B, H314	-

### 4 First-aid measures

#### 4.1 Description of first aid measures

<b>General advice</b>	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
<b>Skin contact</b>	Take off contaminated clothing and shoes immediately. Wash off with plenty of soap and water for at least 15 minutes and consult a physician if feel uncomfortable.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
<b>Inhalation</b>	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
<b>Protecting of first-aiders</b>	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

#### 4.2 Most important symptoms/effects, acute and delayed

1	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
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#### 4.3 Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

### 5 Fire-fighting measures

#### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	Small fire: dry chemical, CO <sub>2</sub> or water spray; Large fire: dry chemical, CO <sub>2</sub> , alcohol-resistant foam or water spray; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Do not get water inside containers.
<b>Unsuitable extinguishing media</b>	No information available.

#### 5.2 Specific hazards arising from the substance or mixture

1	Fire may produce irritating, poisonous or corrosive gases.
2	Development of hazardous combustion gases or vapor possible in the event of fire.
3	May expansion or decompose explosively when heated or involved in fire.

#### 5.3 Advice for firefighters

1	As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
2	Fight fire from a safe distance, with adequate cover.
3	Prevent fire extinguishing water from contaminating surface water or the ground water system.

### 6 Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

1	Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire.
2	Do not touch or walk through spilled material.
3	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

4	Use personal protective equipment, do not breathe gas/mist/vapour/spray.
5	Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.
6	Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

## 6.2 Environmental precautions

1	Prevent further leakage or spillage if safe to do so.
2	Discharge into the environment must be avoided.

## 6.3 Methods and materials for containment and cleaning up

1	Do not touch or cross spills.
2	It is recommended that emergency personnel wear a self-contained breathing apparatus with positive pressure and wear anti-corrosion clothing.
3	Transfer to a tank truck or special collector with a corrosion-resistant pump.
4	Do not touch broken containers and spills before putting on appropriate protective clothing.
5	Cut off the source of the leak as much as possible.
6	Keep leaks in a ventilated place.
7	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
8	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
9	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.

## 6.4 Reference to other sections

1	Personal Protective Equipment advice is contained in Section 8 of the SDS.
2	Disposal considerations advice is contained in Section 13 of the SDS.

# 7 Handling and storage

## 7.1 Precautions for safe handling

### ◆ Protective measures

1	Handling is performed in a well ventilated place.
2	Wear suitable protective equipment.
3	Avoid contact with skin and eyes.

### ◆ Measures to prevent fire

1	Keep away from heat/sparks/open flames/ hot surfaces.
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### ◆ Measures to prevent aerosol and dust generation

1	Not applicable.
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### ◆ Advice on general occupational hygiene

1	Wash hands and face after using the substances.
2	Replace the contaminated clothing immediately.

## 7.2 Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

### 7.3 Specific end use(s)

1 In addition to use mentioned in the Section 1.2, unforeseen other specific end uses.

## 8 Exposure controls/personal protection

### 8.1 Control parameters

#### ◆ Occupational exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
<b>Sodium hydroxide</b>	Japan - JSOH(2024–2025)	-	-	-	-
	Permissible exposure standards for workers in the workplace	-	2	-	4
	France	-	2	-	-
	United Kingdom	-	-	-	2
	Austria	-	2(inhalable aerosol)	-	4(inhalable aerosol)
	Belgium	-	2	-	-
<b>Phenol</b>	Japan - JSOH(2024–2025)	5	19	-	-
	Permissible exposure standards for workers in the workplace	5	19	10	28.5
	European Union	2	8	4	16
	France	2	7.8	4	15.6
	Germany (AGS)	2	8	4	16
	Italy	2	8	4	16

#### ◆ Biological limit values

Component	Standard	Biological monitoring index	Biological limits value	Sampling time	Remark
<b>Phenol</b>	SCOEL(EU)	phenol/urine	120mg/g creatinine	Not strictly regulated	
		Phenol with hydrolysis(Creatinine in urine)	250mg/g	End of shift	

#### ◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300 and GBZ/T 160 series standard Determination of toxic substances in workplace air.

#### ◆ Derived No effect level (DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Water	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Butanedioicacid, 2,3-dihydroxy-(2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Sodium hydroxide	Inhalation	No data available	No data available	1 mg/m3	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
3,5-dinitrosalicylic acid	Inhalation	No data available	No data available	No data available	No data available
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Phenol	Inhalation	No data available	No data available	No data available	8 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available
Sodium sulphite	Inhalation	No data available	No data available	No data available	298 mg/m3
	Oral	No data available	No data available	No data available	No data available
	Dermal	No data available	No data available	No data available	No data available

◆ Predicted No Effect Concentration (PNEC)

Component	A	B	C	D	E	F	G	H
Sodium hydroxide	No data available	No data available	No data available	No data available	No data available	No hazard identified	No data available	No potential for bioaccumulation
Phenol	7.7 µg/L	770 ng/L	2.1 mg/L	91.5 µg/kg sediment dw	9.15 µg/kg sediment dw	No hazard identified	136 µg/kg soil dw	No potential for bioaccumulation
Sodium sulphite	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No hazard identified	No potential for bioaccumulation

**Note 1:**

A: Freshwater; B: Seawater; C: Sewage treatment plant; D: Sediment (freshwater); E: Sediment (seawater); F: Air; G: Soil; H: Secondary poisoning(Hazard for Predators).

**Note 2:**

The PNEC values of the remaining components not shown in the product are not available yet.

## 8.2 Exposure controls

### 8.2.1 Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

### 8.2.2 Personal protection equipment

General requirement	
Eye protection	Must wear appropriate anti-corrosion goggles.
Hand protection	Must wear acid and alkali resistant chemical protective gloves.
Respiratory protection	Must wear appropriate personal respiratory protective equipment.
Skin and body protection	Must wear acid and alkali resistant chemical protective clothing.

### 8.2.3 Environmental exposure controls

Environmental exposure controls	No information available
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## 9 Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	Pale yellow to light yellow transparent liquid
Colour	Pale yellow to light yellow transparent liquid
Odor	No information available
Odor threshold	No information available
pH	14 ( 50g/L , 20°C,Sodium hydroxide )
Melting point/freezing point(°C)	70~80 ( Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4) )
Initial boiling point and boiling range(°C)	1388 ( Sodium hydroxide )
Flash point(Closed cup,°C)	No information available
Evaporation rate	No information available
Flammability	No information available
Upper/lower explosive limits[%(v/v)]	Upper limit : No information available ; Lower limit : No information available
Vapor pressure	< 2kPa ( 20°C,Sodium hydroxide )
Vapor density(Air = 1)	No information available
Relative density(Water=1)	1.79 ( Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4) )
Solubility	Miscible with water ( Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4) )
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	220 ( Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4) )

<b>Kinematic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Particle characteristics</b>	Not applicable

## 9.2 Other information

### 9.2.1 Information with regard to physical hazard classes

<b>Information with regard to physical hazard classes</b>	No information available
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### 9.2.2 Other safety characteristics

<b>Other safety characteristics</b>	No information available
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## 10 Stability and reactivity

### Stability and reactivity

<b>10.1 Reactivity</b>	Contact with incompatible substances can cause decomposition or other chemical reactions.
<b>10.2 Chemical stability</b>	Stable under proper operation and storage conditions.
<b>10.3 Possibility of hazardous reactions</b>	In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen. React violently with acids, phenols or alcohols. In contact with mixtures of aluminium trichloride and nitro-compounds causes a severe explosion.
<b>10.4 Conditions to avoid</b>	Incompatible materials, heat, flame and spark.
<b>10.5 Incompatible materials</b>	Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide. Acids, phenols, alcohols and nitro substituted hydrocarbon. Aluminium trichloride, strong oxidants, nitrate, nitrite and oxygen-halogen salts.
<b>10.6 Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 with amendment 2023/707

DNS reagent	
<b>Skin corrosion/irritation</b>	Causes severe skin burns and eye damage(Category 1B)
<b>Serious eye damage/irritation</b>	Causes serious eye damage(Category 1)
<b>Skin sensitization</b>	Based on available data, the classification criteria are not met
<b>Respiratory sensitization</b>	Based on available data, the classification criteria are not met
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met

### Acute toxicity

Component	LD <sub>50</sub> (oral)	LD <sub>50</sub> (dermal)	LC <sub>50</sub> (inhalation,4h)
<b>Phenol</b>	317mg/kg(Rat)	630mg/kg(Rabbit)	No information available

<b>3,5-dinitrosalicylic acid</b>	860mg/kg(Rat)	No information available	No information available
<b>Sodium sulphite</b>	3560mg/kg(Rat)	No information available	No information available

## | Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP
Water	Not Listed	Not Listed
Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	Not Listed	Not Listed
Sodium hydroxide	Not Listed	Not Listed
3,5-dinitrosalicylic acid	Not Listed	Not Listed
Phenol	Category 3	Not Listed
Sodium sulphite	Not Listed	Not Listed

## | 11.2 Information on other hazards

### | 11.2.1 Endocrine disrupting properties

Component	Endocrine disrupting properties
Water	No information available
Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	No information available
Sodium hydroxide	No information available
3,5-dinitrosalicylic acid	No information available
Phenol	No information available
Sodium sulphite	No information available

### | 11.2.2 Other Information

Other Information	See Section 11.1
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## 12 Ecological information

### | 12.1 Toxicity

#### | Acute aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
<b>Sodium hydroxide</b>	LC <sub>50</sub> :196mg/L (96h)(Fish)	EC <sub>50</sub> : 40.4mg/L (48h)(Crustaceans)	No information available
<b>Phenol</b>	LC <sub>50</sub> : 20.5mg/L (96h)(Fish)	EC <sub>50</sub> : 15mg/L (48h)(Crustaceans)	ErC <sub>50</sub> : 84.5mg/L (96h)(Algae)
<b>Sodium sulphite</b>	LC <sub>50</sub> : 149.5mg/L (96h)(Fish)	No information available	No information available

## Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Phenol	No information available	NOEC : 1.2mg/L(Crustaceans)	NOEC : 25mg/L(Algae)

## 12.2 Persistence and degradability

Component	Persistence (water/soil)	Persistence (air)
3,5-dinitrosalicylic acid	High	High
Sodium sulphite	Low	Low

## 12.3 Bioaccumulative potential

Component	Bioaccumulative potential	Comments
3,5-dinitrosalicylic acid	Low	Log Kow=1.71
Sodium sulphite	Low	Log Kow=-4

## 12.4 Mobility in soil

Component	log Koc	Remark
3,5-dinitrosalicylic acid	1.512	
Phenol	1.92	20 °C
Sodium sulphite	0.476	

## 12.5 Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
Water	Insufficient information, temporarily unable to evaluate
Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	Insufficient information, temporarily unable to evaluate
Sodium hydroxide	Not applicable
3,5-dinitrosalicylic acid	Insufficient information, temporarily unable to evaluate
Phenol	Not PBT/vPvB
Sodium sulphite	Not applicable

## 12.6 Endocrine disrupting properties

Component	Endocrine disrupting properties
Water	No information available
Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	No information available
Sodium hydroxide	No information available

<b>3,5-dinitrosalicylic acid</b>	No information available
<b>Phenol</b>	No information available
<b>Sodium sulphite</b>	No information available

### 12.7 Other adverse effects

	No information available
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## 13 Disposal considerations

### 13.1 Waste treatment methods

<b>Waste chemicals</b>	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
<b>Contaminated packaging</b>	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
<b>Disposal recommendations</b>	Refer to section waste chemicals and contaminated packaging.

## 14 Transport information

### Label and Mark

<b>Transporting Label</b>	
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### IMDG-CODE

<b>UN number</b>	1760
<b>UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S.
<b>Transport hazard class</b>	8
<b>Transport subsidiary hazard class</b>	None
<b>Packing group</b>	III
<b>Marine pollutant ( Yes or no )</b>	No

### IATA-DGR

<b>UN number</b>	1760
<b>UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S.
<b>Transport hazard class</b>	8
<b>Transport subsidiary hazard class</b>	None
<b>Packing group</b>	III

### UN-ADR

<b>UN number</b>	1760
<b>UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S.
<b>Transport hazard class</b>	8
<b>Transport subsidiary hazard class</b>	None
<b>Packing group</b>	III

## Special precautions for user

Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

## Maritime transport in bulk according to IMO instruments

- ◆ Transport in bulk according to Annex II of MARPOL and the IBC code

Not Available

- ◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Not Available

- ◆ Transport in bulk in accordance with the IGC Code

Not Available

## 15 Regulatory information

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

#### International chemical inventory

Component	A	B	C	D	E	F	G	H	I	J	K	L	M
Water	√	√	√	√	√	√	√	√	√	√	√	√	√
Butanedioicacid, 2,3-dihydroxy- (2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)	√	×	×	×	√	√	×	√	×	×	×	√	√
Sodium hydroxide	√	√	√	√	√	√	√	√	√	√	√	√	√
3,5-dinitrosalicylic acid	√	√	√	√	√	√	√	√	×	×	×	√	√
Phenol	√	√	√	√	√	√	√	√	√	√	√	√	√
Sodium sulphite	√	√	√	√	√	√	√	√	√	√	√	√	√

- [A] China Inventory of Existing Chemical Substances(IECSC)  
 [B] European Inventory of Existing Commercial Chemical Substances(EC inventory)  
 [C] United States Toxic Substances Control Act Inventory(TSCA)  
 [D] Canadian Domestic Substances List(DSL)  
 [E] New Zealand Inventory of Chemicals(NZIoC)  
 [F] Philippines Inventory of Chemicals and Chemical Substances(PICCS)  
 [G] Korea Existing Chemicals Inventory(KECL)  
 [H] Australian. Inventory of Industrial Chemical (AIICS)  
 [I] Japan Inventory of Existing & New Chemical Substances(ENCS)  
 [J] Thailand Existing Chemicals Inventory(TECI)  
 [K] Mexico National Inventory of Chemical Substances (INSQ)  
 [L] Russia Inventory of Existing Substances(DRAFT)  
 [M] Inventory of Existing Chemical Substances in Taiwan, China (TCSI)

#### List of Chemical Substances under International Conventions

Component	A	B	C
Water	×	×	×
Butanedioicacid, 2,3-dihydroxy- (2R,3R)-,	×	×	×

<b>potassium sodium salt, hydrate (1:1:1:4)</b>			
<b>Sodium hydroxide</b>	x	x	x
<b>3,5-dinitrosalicylic acid</b>	x	x	x
<b>Phenol</b>	x	x	x
<b>Sodium sulphite</b>	x	x	x

【A】 The Montreal Protocol on Substances that Deplete the Ozone Layer

【B】 Stockholm Convention on Persistent Organic Pollutants (POPs)

【C】 Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

### European chemical inventory

Component	A	B	C	D	E	F	G	H	I
<b>Water</b>	x	x	x	√	x	x	x	x	x
<b>Butanedioicacid, 2,3-dihydroxy-(2R,3R)-, potassium sodium salt, hydrate (1:1:1:4)</b>	x	x	x	√	x	x	x	x	x
<b>Sodium hydroxide</b>	x	x	x	√	√	x	x	x	x
<b>3,5-dinitrosalicylic acid</b>	x	x	x	√	√	x	x	x	x
<b>Phenol</b>	x	x	x	√	√	√	x	x	x
<b>Sodium sulphite</b>	x	x	x	√	√	x	x	x	x

【A】 Candidate list of Substances of Very High Concern for authorization under EU REACH regulation

【B】 Substances requiring authorisation under EU REACH regulation

【C】 Substances restricted under EU REACH

【D】 Pre-registered substances under EU REACH

【E】 Registered substances under EU REACH

【F】 Substance Evaluation – CoRAP under EU REACH

【G】 List of priority substances under EU water policy ( Directive 2455/2001/EC )

【H】 Substances subject to POPs Regulation

【I】 Substances proposed as POPs

Note:

“√” Indicates that the substance included in the regulations.

“x” No data or not included in the regulations.

### German water hazard class(WGK)

Component	WGK	Remark
<b>Sodium hydroxide</b>	WGK 1	The regular and professional use of this substance for drinking water treatment, surface water remediation or waste water treatment is not restricted by this classification.
<b>Phenol</b>	WGK 2	
<b>Sodium sulphite</b>	WGK 1	The regular and professional use of this substance for drinking water treatment, surface water remediation or waste water treatment is not restricted by this classification.

【WGK 1】 slightly hazardous to water

【WGK 2】	obviously hazardous to water
【WGK 3】	highly hazardous to water
【nwg】	non-hazardous to water
【awg】	hazardous to water in general

### German technical instructions on air quality control(TA LUFT)

Component	TA LUFT	Remark
<b>Sodium hydroxide</b>	Chapter 5.2.1 Overall Dust, including fine dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m <sup>3</sup> The mass per unit volume of 0,15 g/m <sup>3</sup> in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m <sup>3</sup> .	
<b>3,5-dinitrosalicylic acid</b>	Chapter 5.2.5 Organic Substances, dust,including fine dust.To be treated as overall dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m <sup>3</sup> The mass per unit volume of 0,15 g/m <sup>3</sup> in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m <sup>3</sup> .	
<b>Phenol</b>	Chapter 5.2.5 Organic Substances, class I. The following values are in all not allowed to be exceeded in the exhaust gas:Mass flow:0,10 kg/hr or Mass conc.:20 mg/m <sup>3</sup>	
<b>Sodium sulphite</b>	Chapter 5.2.1 Overall Dust, including fine dust. The emissions of dust in the exhaust gas are not allowed to exceed the following values:Mass flow:0,20 kg/hr or Mass conc.:20 mg/m <sup>3</sup> The mass per unit volume of 0,15 g/m <sup>3</sup> in exhaust gas is not allowed to be exceeded also on observance or lower deviation of a mass flow of 0,20 kg/h.For emission sources that exceed the mass flow rate of 0.40 kg/h, the mass concentration in waste gas the mass concentration must not exceed 10 mg/m <sup>3</sup> .	

### German technical rules for hazardous substances(TRGS)

Component	TRGS	Remark
Water	TRGS 500 TRGS 509 TRGS 510	
Sodium hydroxide	TRGS 201 TRGS 400 TRGS 555 TRGS 600 TRGS 401 TRGS 500 TRGS 509 TRGS 510	
3,5-dinitrosalicylic acid	TRGS 201 TRGS 400 TRGS 555 TRGS 600 TRGS 401 TRGS 500 TRGS 509 TRGS 510 TRGS 800	
Phenol	TRGS 201 TRGS 400 TRGS 555 TRGS 600 TRGS 402 TRGS 401 TRGS 500 TRGS 509 TRGS 510 TRGS 800	
Sodium sulphite	TRGS 500 TRGS 509 TRGS 510	

## 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## 16 Other information

### Information on revision

Creation Date	2025/12/14
Revision Date	-
Reason for revision	-

### Reference

- [1] IPCS: The International Chemical SafetyCards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.
- [2] IARC, website: <http://www.iarc.fr/>.
- [3] OECD: The Global Portal to Information on Chemical Substances, website: <https://www.echemportal.org/echemportal/>.
- [4] CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.
- [5] NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- [6] EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.
- [7] U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.
- [8] Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

### Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC <sub>50</sub>	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD <sub>50</sub>	Lethal Dose 50%	NTP	National Toxicology Program
EC <sub>50</sub>	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC <sub>x</sub>	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P <sub>OW</sub>	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor		

### Disclaimer

This Safety Data Sheet (SDS) was prepared according to REACH Regulation The data included was derived from

international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.