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SAFETY DATA SHEET

Creation Date 05-Jan-2012 Revision Date 10-Dec-2021 Revision Number 2

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

1.1. Product identifier

Product Description: E. coli type O128: K67 (B12) Agglutinating Sera

Cat No.: R30956401

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

Recommended Use Laboratory chemicals.
Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company Oxoid Ltd

Wade Road

Basingstoke, Hants, UK

RG24 8PW

Tel: +44 (0) 1256 841144

EU entity/business name Oxoid Deutschland GmbH

Postfach 10 07 53

D-46483 Wesel GERMANY

Tel: + 49 (0) 281 1520 Fax: 49 (0) 281 1521

E-mail address mbd-sds@thermofisher.com

1.4. Emergency telephone number

Chemtrec EU: 001-703-527-3887 Chemtrec US: (800) 424-9300

For customers in Switzerland:

Tox Info Suisse Emergency Number: 145 (24hr)

Tox Info Suisse: +41-44 251 51 51 (Emergency number from abroad)

Chemtrec (24h) Toll-Free: 0800 564 402 Chemtrec Local: +41-43 508 20 11 (Zurich)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

E. coli type O128: K67 (B12) Agglutinating Sera

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CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16

2.2. Label elements

Signal Word None

Hazard Statements

Precautionary Statements

2.3. Other hazards

No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Phenol	108-95-2	EEC No. 203-632-7	<1.0	Acute Tox. 3 (H301) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Muta. 2 (H341) STOT RE 2 (H373)
Sodium hydroxide	1310-73-2	215-185-5	<0.5	Skin Corr. 1A (H314) Eye Dam. 1 (H318)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Phenol	Eye Irrit. 2 (H319) :: 1%<=C<3% Skin Corr. 1B (H314) :: C>=3% Skin Irrit. 2 (H315) :: 1%<=C<3%		-
Sodium hydroxide	Skin Corr. 1A :: C>=5% Skin Corr. 1B :: 2%<=C<5% Eye Irrit. 2 :: 0.5%<=C<2% Skin Irrit. 2 :: 0.5%<=C<2%	-	-

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Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse thoroughly with plenty of water, also under the eyelids. Seek immediate medical

attention/advice.

Skin Contact Wash off immediately with soap and plenty of water. Get medical attention immediately if

symptoms occur.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention.

Inhalation Remove to fresh air. Get medical attention if symptoms occur.

Self-Protection of the First Aider 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

No information available.

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

Notes to Physician 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. Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Hydrogen bromide, Carbon oxides, Nitrogen oxides (NOx).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

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6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Clean contaminated surface thoroughly.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with skin, eyes or clothing. Do not breathe mist/vapors/spray. Ensure adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep at temperatures between 2° and 8 °C.

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany)

Storage Class/LGK 12

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): **CH** - The Government of Switzerland has set a directive on limit values for working materials (Grenzwerte am arbeitplatz) which is based on the Swiss Federal Regulation "Verordnung über die Verhütung von Unfällen und Berufskrankheiten". This directive is administered, periodically revised and enforced by SUVA (Swiss National Accident Insurance Fund). **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

Component	European Union	The United Kingdom	France	Belgium	Spain
Phenol	TWA: 2 ppm (8h)	STEL: 4 ppm 15 min	TWA / VME: 2 ppm (8	TWA: 2 ppm 8 uren	STEL / VLA-EC: 4 ppm
	TWA: 8 mg/m ³ (8h)	STEL: 16 mg/m ³ 15 min	heures). restrictive limit	TWA: 8 mg/m ³ 8 uren	(15 minutos).
	STEL: 4 ppm (15min)	TWA: 2 ppm 8 hr	TWA / VME: 7.8 mg/m ³	STEL: 4 ppm 15	STÉL / VLA-EC: 16
	STEL: 16 mg/m ³	TWA: 7.8 mg/m ³ 8 hr	(8 heures). restrictive	minuten	mg/m³ (15 minutos).
	(15min)	Skin	limit	STEL: 16 mg/m ³ 15	TWA / VLA-ED: 2 ppm
	Skin		STEL / VLCT: 4 ppm.	minuten	(8 horas)
			restrictive limit	Huid	TWA / VLA-ED: 8 mg/m ³
			STEL / VLCT: 15.6		(8 horas)
			mg/m ³ . restrictive limit		Piel
			Peau		
Sodium hydroxide		2 mg/m³ STEL	TWA / VME: 2 mg/m ³ (8	2 mg/m³ VLE	STEL / VLA-EC: 2
			heures).		mg/m³ (15 minutos).

Compo	onent Ita	y Germany	/ Portugal	The Netherlands	Finland
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Phenol	TWA: 2 ppm 8 ore. Media Ponderata nel Tempo TWA: 8.0 mg/m³ 8 ore. Media Ponderata nel Tempo STEL: 4 ppm 15 minuti. Breve termine STEL: 16 mg/m³ 15 minuti. Breve termine Pelle	TWA: 2 ppm (8 Stunden). AGW - exposure factor 2 TWA: 8 mg/m³ (8 Stunden). AGW - exposure factor 2 Haut	STEL: 4 ppm 15 minutos STEL: 16 mg/m³ 15 minutos TWA: 2 ppm 8 horas TWA: 8 mg/m³ 8 horas Pele	huid TWA: 8 mg/m³ 8 uren	TWA: 2 ppm 8 tunteina TWA: 8 mg/m³ 8 tunteina STEL: 4 ppm 15 minuutteina STEL: 16 mg/m³ 15 minuutteina Iho
Sodium hydroxide		2 mg/m³ TWA (inhalable fraction)	Ceiling: 2 mg/m ³		Ceiling: 2 mg/m ³

Component	Austria	Denmark	Switzerland	Poland	Norway
Phenol	Haut	TWA: 1 ppm 8 timer	Haut/Peau	STEL: 16 mg/m ³ 15	TWA: 1 ppm 8 timer
	MAK-KZGW: 4 ppm 15	TWA: 4 mg/m ³ 8 timer	STEL: 5 ppm 15	minutach	TWA: 4 mg/m ³ 8 timer
	Minuten	Hud	Minuten	TWA: 7.8 mg/m ³ 8	STEL: 3 ppm 15
	MAK-KZGW: 16 mg/m ³		STEL: 19 mg/m ³ 15	godzinach	minutter. value from the
	15 Minuten		Minuten		regulation
	MAK-TMW: 2 ppm 8		TWA: 5 ppm 8 Stunden		STEL: 12 mg/m ³ 15
	Stunden		TWA: 19 mg/m ³ 8		minutter. value from the
	MAK-TMW: 8 mg/m ³ 8		Stunden		regulation
	Stunden				Hud
Sodium hydroxide	MAK-KZGW: 4 mg/m ³	Ceiling: 2 mg/m ³	STEL: 2 mg/m ³ 15	STEL: 1 mg/m ³ 15	Ceiling: 2 mg/m ³
	15 Minuten		Minuten	minutach	
	MAK-TMW: 2 mg/m ³ 8		TWA: 2 mg/m ³ 8	TWA: 0.5 mg/m ³ 8	
	Stunden		Stunden	godzinach	

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Phenol	TWA: 2 ppm	kože	TWA: 2 ppm 8 hr.	Skin-potential for	TWA: 7.5 mg/m ³ 8
	TWA: 8 mg/m ³	TWA-GVI: 2 ppm 8	TWA: 8 mg/m ³ 8 hr.	cutaneous absorption	hodinách.
	STEL: 4 ppm	satima.	STEL: 4 ppm 15 min	STEL: 16 mg/m ³	Potential for cutaneous
	STEL: 16 mg/m ³	TWA-GVI: 8 mg/m ³ 8	STEL: 16 mg/m ³ 15 min	STEL: 4 ppm	absorption
	Skin notation	satima.	Skin	TWA: 8 mg/m ³	Ceiling: 15 mg/m ³
		STEL-KGVI: 4 ppm 15		TWA: 2 ppm	
		minutama.			
		STEL-KGVI: 16 mg/m ³			
		15 minutama.			
Sodium hydroxide	TWA: 2.0 mg/m ³	STEL-KGVI: 2 mg/m3 15	STEL: 2 mg/m ³ 15 min		TWA: 1 mg/m ³ 8
	_	minutama.	_		hodinách.
					Ceiling: 2 mg/m ³

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Phenol	Nahk	Skin notation	skin - potential for	STEL: 16 mg/m ³ 15	TWA: 1 ppm 8
	TWA: 2 ppm 8 tundides.	TWA: 2 ppm 8 hr	cutaneous absorption	percekben. CK	klukkustundum.
	TWA: 8 mg/m ³ 8	TWA: 8 mg/m ³ 8 hr	STEL: 4 ppm	TWA: 8 mg/m ³ 8	TWA: 4 mg/m ³ 8
	tundides.	STEL: 16 mg/m3 15 min	STEL: 16 mg/m ³	órában. AK	klukkustundum.
	STEL: 16 mg/m ³ 15	STEL: 4 ppm 15 min	TWA: 2 ppm	lehetséges borön	Skin notation
	minutites.		TWA: 8 mg/m ³	keresztüli felszívódás	Ceiling: 2 ppm
	STEL: 4 ppm 15		_		Ceiling: 8 mg/m ³
	minutites.				
Sodium hydroxide	TWA: 1 mg/m ³ 8		STEL: 2 mg/m ³	STEL: 2 mg/m ³ 15	STEL: 2 mg/m ³
	tundides.		TWA: 2 mg/m ³	percekben. CK	_
	STEL: 2 mg/m ³ 15			TWA: 1 mg/m³ 8	
	minutites.			órában. AK	

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Phenol	skin - potential for	TWA: 2 ppm IPRD	Possibility of significant	possibility of significant	Skin notation
	cutaneous exposure	TWA: 8 mg/m³ IPRD	uptake through the skin	uptake through the skin	TWA: 2 ppm 8 ore
	STEL: 4 ppm	Oda	TWA: 2 ppm 8 Stunden	TWA: 2 ppm	TWA: 8 mg/m ³ 8 ore
	STEL: 16 mg/m ³	STEL: 4 ppm	TWA: 8 mg/m ³ 8	TWA: 8 mg/m ³	STEL: 4 ppm 15 minute
	TWA: 2 ppm	STEL: 16 mg/m ³	Stunden	STEL: 16 mg/m ³ 15	STEL: 16 mg/m ³ 15
	TWA: 8 mg/m ³	_	STEL: 16 mg/m ³ 15	minuti	minute
	_		Minuten	STEL: 4 ppm 15 minuti	
			STEL: 4 ppm 15		
			Minuten		
Sodium hydroxide	TWA: 0.5 mg/m ³	Ceiling: 2 mg/m ³			

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Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Phenol	TWA: 0.3 mg/m ³ 0539	Ceiling: 16 mg/m ³	TWA: 2 ppm 8 urah	Binding STEL: 4 ppm 15	Deri
	Skin notation	Potential for cutaneous	TWA: 8 mg/m ³ 8 urah	minuter	TWA: 2 ppm 8 saat
	MAC: 1 mg/m ³	absorption	Koža	Binding STEL: 16	TWA: 8 mg/m ³ 8 saat
		TWA: 2 ppm	STEL: 4 ppm 15	mg/m³ 15 minuter	STEL: 4 ppm 15 dakika
		TWA: 8 mg/m ³	minutah	TLV: 1 ppm 8 timmar.	STEL: 16 mg/m ³ 15
			STEL: 16 mg/m ³ 15	NGV	dakika
			minutah	TLV: 4 mg/m ³ 8 timmar.	
				NGV	
				Hud	
Sodium hydroxide		TWA: 2 mg/m ³		Binding STEL: 2 mg/m ³	
				15 minuter KGV	
				TLV: 1 mg/m ³ 8 timmar.	
				NGV	

Biological limit values

Component	European Union	United Kingdom	France	Spain	Germany
Phenol			Total Phenol: 250 mg/g	: 120 mg/g Creatinine	Phenol (after
			creatinine urine end of	urine end of shift	hydrolysis): 120 mg/g
			shift		Creatinine urine (end of
					shift)

Component	Italy	Finland	Denmark	Bulgaria	Romania
Phenol		Total phenol: 1.3		Phenol: 200 µg/L urine	total Phenol: 120 mg/g
		mmol/L urine after the		at the end of exposure	Creatinine urine end of
		shift.		or end of work shift	shift

Component	Gibraltar	Latvia	Slovak Republic	Luxembourg	Turkey
Phenol			Phenol: 200 mg/L urine		
			end of exposure or work		
			shift		

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Phenol 108-95-2 (<1.0)				DNEL = 1.23mg/kg bw/dav
100 00 = (1110)				211, 444

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
Phenol 108-95-2 (<1.0)	DNEL = 16mg/m ³			DNEL = 8mg/m ³
Sodium hydroxide 1310-73-2 (<0.5)			DNEL = 1mg/m ³	

Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water sediment		Microorganisms in sewage treatment	
Phenol	PNEC =	PNEC =	PNEC = 0.031mg/L	PNEC = 2.1mg/L	PNEC =

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108-95-2 (<1.0)	0.0077mg/L	0.0915mg/kg		0.136mg/kg soil dw
		sediment dw		

Component	Marine water	Marine water sediment	Marine water Intermittent	Food chain	Air
Phenol	PNEC =	PNEC =			
108-95-2 (<1.0)	0.00077mg/L	0.00915mg/kg			
		sediment dw			

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Disposable gloves	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

Skin and body protection Long sleeved clothing.

Inspect gloves before use. observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information) gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. gloves with care avoiding skin contamination.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

and maintained properly

Large scale/emergency use In case of insufficient ventilation, wear suitable respiratory equipment

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

When RPE is used a face piece Fit Test should be conducted

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State Liquid

Appearance Amber

Odor No information available
Odor Threshold No data available
Melting Point/Range No data available
Softening Point No data available
Boiling Point/Range Not applicable
Flammability (liquid) No data available
Flammability (solid,gas) No information available

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Explosion Limits No data available

Flash Point Not applicable Method - No information available

Autoignition Temperature

Decomposition Temperature

PH

No data available
No data available
6.6 - 6.8

Viscosity

Water Solubility

Solubility in other solvents

No data available
No information available
No information available

Partition Coefficient (n-octanol/water)

Componentlog PowPhenol1.5

Vapor Pressure
Density / Specific Gravity
Bulk Density
Vapor Density
No data available
No data available
No data available
No data available

Particle characteristics Not applicable (liquid)

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

(Air = 1.0)

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous PolymerizationNo information available.Hazardous ReactionsNo information available.

10.4. Conditions to avoid

Incompatible products. Excess heat.

10.5. Incompatible materials

No materials to be especially mentioned.

10.6. Hazardous decomposition products

Hydrogen bromide. Carbon oxides. Nitrogen oxides (NOx).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information Product does not present an acute toxicity hazard based on known or supplied information

(a) acute toxicity;

OralNo data availableDermalNo data availableInhalationNo data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phenol	LD50 = 340 mg/kg (Rat)	LD50 = 630 mg/kg (Rabbit)	-

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Sodium hydroxide	LD50 = 325 mg/kg (Rat)	LD50 = 1350 mg/kg (Rabbit)	-

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

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(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available. delayed

11.2. Information on other hazards

Endocrine Disrupting Properties Assess endocrine disrupting properties for human health. This product does not contain any

known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effectsContains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Phenol	4-7 mg/L LC50 96 h	EC50: 10.2 - 15.5 mg/L, 48h	EC50: 0.0188 - 0.1044 mg/L,
	32 mg/L LC50 96 h	(Daphnia magna)	96h static (Pseudokirchneriella
		EC50: 4.24 - 10.7 mg/L, 48h	subcapitata)
		Static (Daphnia magna)	EC50: 187 - 279 mg/L, 72h
			static (Desmodesmus
			subspicatus)
			EC50: = 46.42 mg/L, 96h
			(Pseudokirchneriella subcapitata)
Sodium hydroxide	LC50: = 45.4 mg/L, 96h static		-

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Component	Microtox	M-Factor
Phenol	EC50 21 - 36 mg/L 30 min	
	EC50 = 23.28 mg/L 5 min	
	EC50 = 25.61 mg/L 15 min	
	EC50 = 28.8 mg/L 5 min	
	EC50 = 31.6 mg/L 15 min	
Sodium hydroxide	-	

12.2. Persistence and degradability No information available

12.3. Bioaccumulative potential No information available

Component	log Pow	Bioconcentration factor (BCF)	
Phenol	1.5	No data available	

12.4. Mobility in soil No information available .

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

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

12.7. Other adverse effects

Persistent Organic Pollutant Ozone Depletion Potential This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

European Waste Catalogue (EWC) According to the European Waste Catalog, Waste Codes are not product specific, but

application specific.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

Switzerland - Waste Ordinance Disposal should be in accordance with applicable regional, national and local laws and

regulations. Ordinance on the Avoidance and the Disposal of Waste (Waste Ordinance,

ADWO) SR 814.600

https://www.fedlex.admin.ch/eli/cc/2015/891/en

SECTION 14: TRANSPORT INFORMATION

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IMDG/IMO

Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards No hazards identified

No special precautions required 14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

	Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
	Phenol	108-95-2	203-632-7	-	-	Х	X	KE-28209	X	Х
Г	Sodium hydroxide	1310-73-2	215-185-5	-	-	Х	Х	KE-31487	Х	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Phenol	108-95-2	X	ACTIVE	X	Ī	X	Х	X
Sodium hydroxide	1310-73-2	Χ	ACTIVE	Χ	•	Χ	Χ	Х

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Phenol	-	Use restricted. See item 75. (see link for restriction details)	-
Sodium hydroxide	-	Use restricted. See item 75. (see link for restriction details)	-

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https://echa.europa.eu/substances-restricted-under-reach

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Phenol	108-95-2	Not applicable	Not applicable
Sodium hydroxide	1310-73-2	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

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. 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.

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

Water endangering class = 1 (self classification)

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class	
Phenol	WGK2	Class I: 20 mg/m³ (Massenkonzentration)	
Sodium hydroxide	WGK1		

Component France - INRS (Tables of		France - INRS (Tables of occupational diseases)
Ī	Phenol	Tableaux des maladies professionnelles (TMP) - RG 14

Swiss Regulations

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2).

Take note on Article 13 Maternity Ordinance (SR 822.111.52) with regards expectant and nursing mothers.

	Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Γ	Phenol	Prohibited and Restricted		
L	108-95-2 (<1.0)	Substances		
Γ	Sodium hydroxide	Prohibited and Restricted		
1	1310-73-2 (<0.5)	Substances		

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H341 - Suspected of causing genetic defects

H373 - May cause damage to organs through prolonged or repeated exposure

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

OXDR30956401

E. coli type O128: K67 (B12) Agglutinating Sera

H331 - Toxic if inhaled

Legend

CAS - Chemical Abstracts Service

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Revision Date 10-Dec-2021

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

Substances/EU List of Notified Chemical Substances Substances List PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances **ENCS** - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic

TWA - Time Weighted Average

VOC - (volatile organic compound)

IARC - International Agency for Research on Cancer

Predicted No Effect Concentration (PNEC)

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from

Shins ATE - Acute Toxicity Estimate

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

05-Jan-2012 **Creation Date** 10-Dec-2021 **Revision Date Revision Summary** Not applicable.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 .

For Switzerland - Compiled in accordance with the technical provisions referred to in Annex 2. Number 3, ChemO (SR 813.11 - Ordinance on Protection against Dangerous Substances and Preparations).

Disclaimer

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End of Safety Data Sheet