

according to UK REACH Regulation

Glutaraldehyde 3 %, Cacodylatebuffer

Revision date: 01.12.2023

Product code: 12033.xxxxx

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

1.1. Product identifier

Glutaraldehyde 3 %, Cacodylatebuffer

UFI:

X3A2-H184-J008-H67D

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

Use of the substance/mixture

Use as laboratory reagent.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
E-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
E-mail:	gefahrstoffmanagement@morphisto.de	
Internet:	http://www.morphisto.de	
1.4. Emergency telephone	Poison Information Center Mainz, Germany	γ, Tel: +49(0)6131/19240

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

glutaraldehyde Sodium dimethylarsinate

Signal word:

Pictograms:



Hazard statements

H302+H332	Harmful if swallowed or if inhaled.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.



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H318	Causes serious eye damage.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H411	Toxic to aquatic life with long lasting effects.	
Precautionary statemer	nts	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
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.	
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.	
P391	Collect spillage.	
Special labelling of cert	ain mixtures	
EUH071	Corrosive to the respiratory tract.	
Labelling of packages v	where the contents do not exceed 125 ml	
Signal word:	Danger	
Pictograms:		
Hazard statements H317-H318-H334		
Precautionary statemer	nts	
P280-P305+P351+P	338-P310	
2.3. Other hazards		
(PBT) or very persist The substance/mixtu	ure contains no components considered to be either persistent, bioaccumulating and toxic ent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: ure does not contain any components that are considered to be hazardous according to or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated	

Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in quantities of 0.1 % or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2. Mixtures



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Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (GB CLP Regula				
111-30-8	glutaraldehyde			1 - < 5 %	
	203-856-5	605-022-00-X	1-2119455549-26-		
	Acute Tox. 2, Acute Tox. 3, Ski 3, Aquatic Acute 1, Aquatic Chi EUH071				
124-65-2	Sodium dimethylarsinate	1 - < 5 %			
	204-708-2	033-002-00-5			
	Acute Tox. 3, Acute Tox. 3, Aq				
7647-01-0	hydrochloric acid %	< 0.1 %			
	231-595-7	017-002-01-X	01-2119484862-27		
	Met. Corr. 1, Skin Corr. 1B, Eye				
67-56-1	methanol	< 0.1 %			
	200-659-6	603-001-00-X	01-2119433307-44		
	Flam. Liq. 2, Acute Tox. 3, Acu				

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	
111-30-8	203-856-5	glutaraldehyde	1 - < 5 %
		50 = 0,5 mg/l (vapours); inhalation: LC50 = 0,28 mg/l (dusts or mists); dermal: mg/kg; oral: LD50 = 135 mg/kg STOT SE 3; H335: >= 0,5 - < 5 l; H400: M=1	
124-65-2	204-708-2	Sodium dimethylarsinate	1 - < 5 %
	inhalation: ATE 2000 mg/kg	= 3 mg/l (vapours); inhalation: LC50 = 5,12 mg/l (dusts or mists); oral: LD50 =	
7647-01-0	231-595-7	hydrochloric acid %	< 0.1 %
		222 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 9: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100	
67-56-1	200-659-6	methanol	< 0.1 %
		50 = 3 mg/l (vapours); inhalation: ATE = 0,5 mg/l (dusts or mists); dermal: LD50 = l: LD50 = 100 mg/kg STOT SE 1; H370: >= 10 - 100 STOT SE 2; H371: >= 3 -	

Further Information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH:glutaraldehyde (CAS 111-30-8)

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. If breathing is irregular or stopped, administer artificial respiration. Medical treatment necessary. In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.



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After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin irritation, seek medical treatment.

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. Rinse cautiously with water for several minutes. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. Carbon dioxide (CO2). Dry extinguishing powder. alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

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. See protective measures under point 7 and 8. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided.

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.

Other information

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8



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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. Wear suitable protective clothing. See section 8.

Advice on protection against fire and explosion

Usual measures for fire prevention.

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. Always close containers tightly after the removal of product.

Further information on handling

General protection and hygiene measures: See section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorbtion of humidity. Recommended storage temperature: 4-8°C Protect against: frost. UV-radiation/sunlight. heat. Humidity

7.3. Specific end use(s)

See section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
111-30-8	Glutaraldehyde	0.05	0.2		TWA (8 h)	WEL
		0.05	0.2		STEL (15 min)	WEL
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL
67-56-1	Methanol	200	266		TWA (8 h)	WEL
		250	333		STEL (15 min)	WEL



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DNEL/DMEL values

CAS No	Substance							
DNEL type		Exposure route	Effect	Value				
7647-01-0	hydrochloric acid %							
Worker DNEL	, acute	inhalation	local	15 mg/m³				
Worker DNEL	, long-term	inhalation	local	8 mg/m³				
67-56-1	methanol		·	·				
Worker DNEL	, acute	inhalation	local	260 mg/m ³				
Worker DNEL	, acute	dermal	systemic	40 mg/kg bw/day				
Worker DNEL	, acute	inhalation	systemic	260 mg/m ³				
Worker DNEL	, long-term	inhalation	local	260 mg/m ³				
Worker DNEL	, long-term	dermal	systemic	40 mg/kg bw/day				
Worker DNEL, long-term		inhalation	systemic	260 mg/m ³				
	•							

PNEC values

CAS No	Substance			
Environmen	Environmental compartment Value			
67-56-1	methanol			
Freshwater	Freshwater			
Marine water 2,08 mg/l				
Marine water (intermittent releases) 1540 mg/l				
Freshwater sediment		77 mg/kg		
Marine sedir	7,7 mg/kg			
Micro-organisms in sewage treatment plants (STP) 100 m				
Soil	Soil			

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. Use extractor hood (laboratory). Process within closed systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. Wear safety glasses; chemical goggles (if splashing is possible). EN 166

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. Wear suitable gloves. Suitable material: FKM (fluororubber). - Thickness of glove material: 0,4 mm Breakthrough time >= 8 h Butyl rubber. - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h



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CR (polychloroprenes, Chloroprene rubber). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h NBR (Nitrile rubber). - Thickness of glove material: 0,35 mm

Breakthrough time >= 8 h

PVC (Polyvinyl chloride). - Thickness of glove material: 0,5 mm

Breakthrough time >= 8 h

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Check leak tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Use of protective clothing. Suitable protective clothing: Lab apron.

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500 (D).

Respiratory protection

In case of inadequate ventilation wear respiratory protection. With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

Insufficient ventilation.

Release of: product.

exceeding exposure limit values

Suitable respiratory protective equipment:

Combination filtering device (EN 14387); Type : A-P3

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Details on the requirements for use and maximum concentrations can be found in the "Rules for the use of respiratory protective devices" (BGR 190).

Environmental exposure controls

No special precautionary measures are necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Colour: Odour:	liquid colourless, clear characteristic	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and		not determined
boiling range:		
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		7,0 - 7,3
Viscosity / kinematic:		not determined
Water solubility:		not determined
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined



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Density (at 20 °C):	1,0 g/cm³					
Relative vapour density:	not determined					
Particle characteristics:	not applicable					
9.2. Other information						
Information with regard to physical hazard	classes					
Explosive properties						
The product is not: Explosive. none						
Sustaining combustion:	Not sustaining combustion					
Self-ignition temperature						
Gas:	not determined					
Oxidizing properties						
none						
Other safety characteristics						
Evaporation rate:	not determined					
Solvent separation test:	not determined					
Solvent content:	not determined					
Solid content:	not determined					
Sublimation point:	not determined					
Softening point:	not determined					
Pour point:	not determined					
Viscosity / dynamic:	not determined					
Flow time:	not determined					
SECTION 10: Stability and reactivity						

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Refer to chapter 10.5.

10.4. Conditions to avoid

Protect against: UV-radiation/sunlight. heat.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide. Carbon dioxide (CO2).

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if swallowed. Harmful if inhaled.

ATEmix calculated

ATE (oral) 1919 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) 14,29 mg/l; ATE (inhalation dust/mist) 5,990 mg/l



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CAS No	Chemical name									
	Exposure route	Dose		Species	Source	Method				
111-30-8	glutaraldehyde	glutaraldehyde								
	oral	LD50 mg/kg	135	Rat	GESTIS					
	dermal	LD50 mg/kg	>1000	Rabbit	GESTIS					
	inhalation (4 h) vapour	LC50	0,5 mg/l	Rat						
	inhalation (4 h) dust/mist	LC50	0,28 mg/l	Rat		OECD 403				
124-65-2	Sodium dimethylarsinate									
	oral	LD50 mg/kg	2000	Rat	suppliers SDS.					
	inhalation vapour	ATE	3 mg/l							
	inhalation (4 h) dust/mist	LC50	5,12 mg/l	Monkey	suppliers SDS.					
7647-01-0	hydrochloric acid %									
	oral	LD50 mg/kg	2222	Rat	suppliers SDS.					
67-56-1	methanol									
	oral	LD50 mg/kg	100	Rat	suppliers SDS.					
	dermal	LD50 mg/kg	300	Rabbit	suppliers SDS.					
	inhalation (4 h) vapour	LC50	3 mg/l	Rat	suppliers SDS.					
	inhalation dust/mist	ATE	0,5 mg/l							

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (glutaraldehyde) May cause an allergic skin reaction. (glutaraldehyde)

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (glutaraldehyde)

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.

11.2. Information on other hazards

Endocrine disrupting properties

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

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity



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Toxic to aquatic life with long lasting effects.

CAS No	Chemical name										
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method				
111-30-8	glutaraldehyde	glutaraldehyde									
	Acute fish toxicity	LC50 mg/l	12,2	96 h	sheepshead minnows	ECHA					
	Acute crustacea toxicity	EC50	5,1 mg/l		Daphnia pulex (water flea)	GESTIS					
124-65-2	Sodium dimethylarsinate										
	Acute fish toxicity	LC50 mg/l	>152	96 h	Oncorhynchus mykiss	suppliers SDS.					
	Acute crustacea toxicity	EC50 mg/l	>61,6	48 h	Daphnia magna	suppliers SDS.					
67-56-1	methanol										
	Acute fish toxicity	LC50 mg/l	15400	96 h	Lepomis macrochirus	ECHA Dossier					
	Acute algae toxicity	ErC50 mg/l	22000	96 h	Pseudokirchneriella subcapitata	ECHA Dossier					
	Acute crustacea toxicity	EC50 mg/l	>1000	48 h	Daphnia magna	ECHA Dossier	OECD 202				

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name						
	Method	Method Value d Source					
	Evaluation						
67-56-1	methanol						
	other guideline	96%		20	ECHA Dossier		
	Easily biodegradable (concerning to the criteria of the OECD)						

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
111-30-8	glutaraldehyde	-0,18
124-65-2	Sodium dimethylarsinate	-1,55
67-56-1	methanol	-0,77

BCF

CAS No	Chemical name	BCF	Species	Source
111-30-8	glutaraldehyde	3,16		
67-56-1	methanol	<10		

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.

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



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The product has not been tested.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal. Non-contaminated packages may be recycled.

According to (EWC) European Waste Catalogue, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Control report for waste code/ waste marking according to (EWC) European Waste Catalogue:

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

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 (ADR/RID)

14.1. UN number or ID number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
	(glutaraldehyde, Sodium dimethylarsinate)
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-
Inland waterways transport (ADN)	
<u>14.1. UN number or ID number:</u>	UN 3082



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<u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u> Hazard label:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaraldehyde, Sodium dimethylarsinate) 9 III 9	
Classification code: Special Provisions: Limited quantity: Excepted quantity: Marine transport (IMDG) <u>14.1. UN number or ID number:</u> <u>14.2. UN proper shipping name:</u> <u>14.3. Transport hazard class(es):</u> <u>14.4. Packing group:</u> Hazard label:	M6 274 335 375 601 5 L E1 UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaraldehyde, sodium dimethyl arsinate) 9 III 9	
Special Provisions: Limited quantity: Excepted quantity: EmS: Air transport (ICAO-TI/IATA-DGR) 14.1. UN number or ID number: 14.2. UN proper shipping name: 14.3. Transport hazard class(es): 14.4. Packing group: Hazard label:	274 335 969 5 L E1 F-A, S-F UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glutaraldehyde, sodium dimethyl arsinate) 9 III 9	
Special Provisions: Limited quantity Passenger: Passenger LQ: Excepted quantity: IATA-packing instructions - Passenger: IATA-max. quantity - Passenger: IATA-packing instructions - Cargo: IATA-max. quantity - Cargo:	A97 A158 A197 A215 30 kg G Y964 E1 964 450 L 964 450 L	
14.5. Environmental hazards ENVIRONMENTALLY HAZARDOUS:	Yes	
Danger releasing substance: 14.6. Special precautions for user	glutaraldehyde, Sodium dimethylarsinate	

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Refer to section 6-8

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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):
glutaraldehyde

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 19, Entry 75

2010/75/EU (VOC):	No information available.
2004/42/EC (VOC):	No information available.
Information according to 2012/18/EU	E2 Hazardous to the Aquatic Environment
(SEVESO III):	

Additional information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile
	work protection guideline' (94/33/EC).
Water hazard class (D):	3 - highly hazardous to water

Water hazard class (D): Skin resorption/Sensitization:

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out: glutaraldehyde hydrochloric acid % methanol

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,2,3,4,5,6,7,9,11,12,13,14,15,16. Rev. 1.0; Initial release: 05.05.2017 Rev. 2,0; 01.12.2023; general adjustment(s)

Causes allergic hypersensitivity reactions.



according to UK REACH Regulation

Revision date: 01.12.0203 Product code: 12033.xxxx Page 14 of 16 Abbroviations and acronyms ADR: Accord europeen sur le transport des marchandises dangereuses par Route Avx3V: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen AVX: Availaverzeichnisverordnung AVW: Availaverzeichnisverordnung Cas Chemical Abbratack Service Cas Chemical Abbratack Service CAS Chemical Abbratack Service DNEL: Derived No Effect Level C day(s) EAVX: Europalasche Abfallverzeichnis gemäß Entwurf Abfallverzeichnisverordnung EINCS: European INvertory of Existing Commercial chemical Substances ELINCS: European INAE (Notified Chemical Substances ECIAX: European INVertory of Existing Commercial chemical Substances ELINCS: European INAE (Notified Chemical Substances) ECIAX: European INAE (Notified Chemical Substances) ELINCS: European Vasit Codod Regulational Substances ECIAX: European INAE (Notified Chemical Substances) ELINCS: European Vasit Codod Negalization ICAA: International Marining Code for Dangerous Goods IXATA: International Kimitanice on Hazardous Substances, Germany) I: hour ICAAC: International Civil Avaition Organization ICAAC: International Air Transport Association* (ICAO) ICAAC: International Kimitan Code for Dangerous Goods IXATA International Marintena on Hazarodous Substances, Germany)		Glutaraldehyde 3 %, Cacodylatebuffer	5 44 446
ADR: Accord europén sur le transport des marchandises dangereuses par Route AGW: Arbeitsplatzgrenzvert AW: European Neetlenz Service ELINCS: European INeetlory of Existing Commercial chemical Substances ELINCS: European INeetlory of Existing Commercial chemical Substances ECHA: European Chemicals Agency EW: European Vaste Godos Regulations by the "International Air Transport Association" (IATA) ICAO: International Marine Code for Dangerous Goods IATA: International Marine Code for Dangerous Goods IATA: International Air Transport Association IATA DRF: Dangerous Godos Regulations by the "International Air Transport Association" (IATA) ICAO: International CWI Aviation Organization ICAO: International CWI Aviation Organization ICAO: International Adverse effect level LOAE: Lowest observed adverse effect level LOAE: Lowest observed adverse effect level NOAEE: Lowest observed adverse effect level NOAEE: Lowest observed adverse effect level NOAEE: No observed adver	Revision date: 01.12.2023	Product code: 12033.xxxxx	Page 14 of 16
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according to UK REACH Regulation

Glutaraldehyde 3 %, Cacodylatebuffer

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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) EmS: Emergency Schedules MFAG: Medical First Aid Guide MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container For abbreviations and acronyms, see table at http://abbrev.esdscom.eu For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). Met. Corr: Corrosive to metals Flam. Liq: Flammable liquids Acute Tox: Acute toxicity Skin Corr: Skin corrosion Skin Irrit: Skin irritation Eye Dam: Eye damage Resp. Sens: Respiratory sensitisation Skin Sens: Skin sensitisation STOT SE: Specific target organ toxicity - single exposure Aquatic Acute: Acute aquatic hazard Aquatic Chronic: Chronic aquatic hazard

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

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Dam. 1; H318	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.



according to UK REACH Regulation

Glutaraldehyde 3 %, Cacodylatebuffer			
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H335	May cause respiratory irritation.		
H370	Causes damage to organs.		
H400	Very toxic to aquatic life.		
H410 Very toxic to aquatic life with long lasting effects.			
H411 Toxic to aquatic life with long lasting effects.			
EUH071	Corrosive to the respiratory tract.		
Further Information			

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. Classification according to Regulation (EC) No 1272/2008 [CLP] -Classification procedure:

Health hazards: Calculation method.

Environmental hazards: Calculation method.

Physical hazards: On basis of test data and / or calculated and / or estimated.

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