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SAFETY DATA SHEET

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

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

1.1 Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
554655	BD Cytofix™ Fixation Buffer	No data available

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

Identified uses: Scientific and industrial laboratory use. For research use only.

Uses advised against: Not for use in diagnostic or therapeutic procedures.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Becton Dickinson France S.A.S. Belgian Branch
Erembodegem-Dorp 86
9320 Erembodegem
Belgium

Telephone: 32 2 400 98 95
Fax: 32 2 401 70 94

Contact Person: BD Biosciences - Centralized European Office
Regulatory Compliance Department
E-mail: help.biosciences@europe.bd.com

1.4 Emergency telephone number: 32 2 400 98 95

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567

Health Hazards

Skin irritation	Category 2	H315: Causes skin irritation.
Serious eye damage	Category 1	H318: Causes serious eye damage.
Skin sensitizer	Category 1	H317: May cause an allergic skin reaction.

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Germ Cell Mutagenicity	Category 2	H341: Suspected of causing genetic defects.
Carcinogenicity	Category 1B	H350: May cause cancer.

2.2 Label Elements

Signal Word: Danger

Hazard Statement(s):
H315: Causes skin irritation.
H318: Causes serious eye damage.
H317: May cause an allergic skin reaction.
H341: Suspected of causing genetic defects.
H350: May cause cancer.

Precautionary Statements

Prevention:
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash face, hands and any exposed skin thoroughly after handling.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P363: Wash contaminated clothing before reuse.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P362: Take off contaminated clothing.
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.
P308+P313: IF exposed or concerned: Get medical advice/attention.

Storage:
P405: Store locked up.

Disposal:
P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

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Hazardous ingredients which must be listed on the label:

Formaldehyde

2.3 Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical name	Concentration	CAS-No.	EC No.	REACH Registration No.	M-Factor:	Notes
Formaldehyde	3 - <5%	50-00-0	200-001-8	No data available.	No data available.	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.
# This substance has workplace exposure limit(s).
This substance is listed as SVHC.

Classification

Chemical name	Classification	Notes
Formaldehyde	Classification: Eye Dam.: 1: H318; STOT SE: 3: H335; Skin Sens.: 1: H317; Skin Corr.: 1B: H314; Muta.: 2: H341; Carc.: 1B: H350; Acute Tox.: 3: H301; Acute Tox.: 3: H331; Acute Tox.: 3: H311; Aquatic Acute: 2: H401; Supplemental label information: None known.	Note B, Note D

CLP: Regulation No. 1272/2008.
The full text for all H-statements is displayed in section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Causes serious eye damage. Causes skin irritation. Suspected of causing genetic defects. May cause cancer. May cause an allergic skin reaction. Get immediate medical advice/attention. If medical advice is needed, have product container or label at hand.

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Inhalation:	Get medical attention if any discomfort continues. Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.
Skin Contact:	Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.
Eye contact:	Important! Immediately rinse with water for 60 minutes. Get medical attention immediately.
Ingestion:	If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Get medical attention immediately.
Personal Protection for First-aid Responders:	No data available.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	Symptoms may be delayed.
Hazards:	Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. May cause genetic defects. May cause cancer.

4.3 Indication of immediate medical attention and special treatment needed

Treatment:	Get immediate medical advice/attention. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

SECTION 5: Firefighting measures

General Fire Hazards:	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water to keep fire exposed containers cool and disperse vapors.

5.1 Extinguishing media

Suitable extinguishing media:	Water spray, fog, CO2, dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.
5.2 Special hazards arising from the substance or mixture:	Fire or excessive heat may produce hazardous decomposition products.

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5.3 Advice for firefighters

Special fire-fighting procedures:	No unusual fire or explosion hazards noted.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wash thoroughly after dealing with a spillage. Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Contact local authorities in case of spillage to drain/aquatic environment.
6.1.1 For non-emergency personnel:	No data available.
6.1.2 For emergency responders:	No data available.
6.2 Environmental Precautions:	Do not release into the environment. Environmental manager must be informed of all major spillages.
6.3 Methods and material for containment and cleaning up:	Stop leak if possible without any risk. Absorb spillage with suitable absorbent material. Collect for salvage or disposal. Prevent runoff from entering drains, sewers, or streams. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
6.4 Reference to other sections:	No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Technical measures:	No data available.
Local/Total ventilation:	No data available.
Safe handling advice:	Wash at the end of each work shift and before eating, smoking and using the toilet.Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes and avoid contact with skin and clothing. Wash promptly with soap and water if skin becomes contaminated. When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as

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required.

Contact avoidance measures: No data available.

7.2 Conditions for safe storage, including any incompatibilities

Safe storage conditions: Store in tightly closed original container in a dry, cool and well-ventilated place.

Safe packaging materials: No data available.

7.3 Specific end use(s): Reserved for industrial and professional use.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical name	Type	Form of exposure	Exposure Limit Values		Source
Formaldehyde	TWA		2 ppm	2.5 mg/m3	EH40 WEL (2007)
	STEL 15 minutes		2 ppm	2.5 mg/m3	EH40 WEL (01 2020)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

DNEL-Values

Remarks: DNEL-Values

Critical component	Type	Route of Exposure	Health Warnings	Remarks
Formaldehyde	General population	Inhalation	Systemic, long-term; 3.2 mg/m3	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 9 mg/m3	Repeated dose toxicity
	Workers	Eyes	Local effect;	Medium hazard (no threshold derived)
	Workers	Inhalation	Local, short-term; 0.75 mg/m3	Repeated dose toxicity
	General population	Eyes	Local effect;	Medium hazard (no threshold derived)
	Workers	Dermal	Systemic, long-term; 240 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 4.1 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 102 mg/kg	Repeated dose toxicity
	Workers	Dermal	Local, long-term; 37 µg/cm2	Skin sensitization
	General population	Inhalation	Local, long-term; 0.1 mg/m3	Repeated dose toxicity

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	Workers	Inhalation	Local, long-term; 0.375 mg/m3	Repeated dose toxicity
	General population	Dermal	Local, long-term; 12 µg/cm2	Skin sensitization
Potassium chloride (KCl)	Workers	Inhalation	Systemic, long-term; 1064 mg/m3	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 273 mg/m3	Repeated dose toxicity
	General population	Inhalation	Systemic, short-term; 1365 mg/m3	Repeated dose toxicity
	Workers	Inhalation	Systemic, short-term; 5320 mg/m3	Repeated dose toxicity
	General population	Oral	Systemic, short-term; 455 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 182 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 91 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term; 303 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, short-term; 910 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, short-term; 910 mg/kg	Repeated dose toxicity
Phosphoric acid, sodium salt (1:2)	Workers	Eyes	Local effect;	No hazard identified
	Workers	Inhalation	Systemic, long-term; 4.07 mg/m3	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 3.04 mg/m3	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 6.63 mg/m3	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 15.47 mg/m3	Repeated dose toxicity
Sodium Chloride (NaCl)	General population	Inhalation	Systemic, long-term; 443.28 mg/m3	Repeated dose toxicity
	Workers	Inhalation	Systemic, long-term; 2068.62 mg/m3	Repeated dose toxicity
	Workers	Inhalation	Systemic, short-term; 2068.62 mg/m3	Repeated dose toxicity
	General population	Inhalation	Systemic, short-term; 443.28 mg/m3	Repeated dose toxicity
	General population	Oral	Systemic, long-term; 126.65 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, long-term; 295.52 mg/kg	Repeated dose toxicity
	Workers	Dermal	Systemic, short-term; 295.52 mg/kg	Repeated dose toxicity
	General population	Oral	Systemic, short-term; 126.65 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, short-term; 126.65 mg/kg	Repeated dose toxicity
	General population	Dermal	Systemic, long-term; 126.65 mg/kg	Repeated dose toxicity
Phosphoric acid, potassium salt (1:1)	Workers	Eyes	Local effect;	No hazard identified
	General population	Eyes	Local effect;	No hazard identified
	Workers	Inhalation	Systemic, long-term; 14.82 mg/m3	Repeated dose toxicity
	General population	Inhalation	Systemic, long-term; 6.35 mg/m3	Repeated dose toxicity

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PNEC-Values

Remarks: PNEC-Values

Critical component	Environmental compartment	PNEC-Values	Remarks
Formaldehyde	Soil	0.2 mg/kg	
	Aquatic (freshwater)	0.44 mg/l	
	Aquatic (marine water)	0.44 mg/l	
	Sediment (marine water)	2.3 mg/kg	
	Sediment (freshwater)	2.3 mg/kg	
	Sewage treatment plant	0.19 mg/l	
Potassium chloride (KCl)	Aquatic (marine water)	0.1 mg/l	
	Sewage treatment plant	10 mg/l	
	Aquatic (freshwater)	0.1 mg/l	
Phosphoric acid, sodium salt (1:2)	Sewage treatment plant	50 mg/l	
	Aquatic (freshwater)	0.05 mg/l	
	Aquatic (marine water)	0.005 mg/l	
Sodium Chloride (NaCl)	Soil	4.86 mg/kg	
	Aquatic (freshwater)	5 mg/l	
	Sewage treatment plant	500 mg/l	

8.2 Exposure controls

Appropriate Engineering Controls: Adequate ventilation should be provided whenever the material is heated or mists are generated.

Individual protection measures, such as personal protective equipment

Eye/face protection: Chemical goggles and face shield are recommended.

Hand Protection: Material: Chemical resistant gloves

Skin and Body Protection: Wear a lab coat or similar protective clothing. Wear appropriate clothing to prevent repeated or prolonged skin contact.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

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Hygiene measures:	Do not get in eyes. Wash hands after contact. Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Avoid contact with skin. Do not breathe dust/fume/gas/mist/vapors/spray.
Environmental Controls:	Data available upon request.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Odorless
Odor Threshold:	No data available.
Freezing point:	No data available.
Boiling Point:	No data available.
Flammability:	No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	The physical-chemical properties of this material have not been fully investigated.
Auto-ignition temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	Not applicable

Viscosity

Dynamic viscosity:	Not determined.
Kinematic viscosity:	No data available.
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	Soluble
Solubility (other):	No data available.
Dissolution Rate:	No data available.

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Partition coefficient (n-octanol/water):	No data available.
Dispersion Stability:	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Bulk density:	No data available.
Relative vapor density:	No data available.

9.2 Other information

VOC Content: EU. Directive 2010/75/EU on Industrial Emissions (IPPC), Annex II, L 334/17: 0 % (calculated)
EC Directive 2004/42: 34.27 g/l ~4.21 % (calculated)

SECTION 10: Stability and reactivity

10.1	**Reactivity:**	Material is stable under normal conditions.
10.2	**Chemical Stability:**	No data available.
10.3	**Possibility of hazardous reactions:**	Stable; however, may decompose if heated. None under normal conditions.
10.4	**Conditions to avoid:**	Avoid exposure to high temperatures or direct sunlight.
10.5	**Incompatible Materials:**	Strong oxidizing agents.
10.6	**Hazardous Decomposition Products:**	By heating and fire, harmful vapors/gases may be formed.

SECTION 11: Toxicological information

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

Inhalation:	May cause irritation to the respiratory system.
Skin Contact:	Causes skin irritation. Prolonged or repeated contact may cause skin sensitization in susceptible individuals.
Eye contact:	May cause chemical eye burns. Avoid contact with eyes.

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Ingestion: Ingestion may cause severe irritation of the mouth, the esophagus and the gastrointestinal tract.

Information on likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix: 2,378.12 mg/kg
Components:	
Formaldehyde	LD 50 (Rat): 460 mg/kg Weight of evidence

Dermal

Product:	ATEmix: 6,420.93 mg/kg
Components:	
Formaldehyde	LD 50 (Rabbit): 270 mg/kg

Inhalation

Product:	ATEmix: 71.34 mg/l Vapour;
Components:	
Formaldehyde	No data available.

Repeated dose toxicity

Product:	No data available.
Components:	
Formaldehyde	No data available.

Skin Corrosion/Irritation

Product:	No data available.
Components:	
Formaldehyde	No data available.

Serious Eye Damage/Eye Irritation

Product:	No data available.
Components:	
Formaldehyde	No data available.

Respiratory or Skin Sensitization

Product:	No data available.
Components:	
Formaldehyde	Skin sensitization:, in vivo (Guinea pig): Sensitising

Carcinogenicity

Product:	No data available.
Components:	
Formaldehyde	No data available.

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Germ Cell Mutagenicity
In vitro
Product: No data available.
Components:
Formaldehyde No data available.

In vivo
Product: No data available.
Components:
Formaldehyde No data available.

Reproductive toxicity
Product: No data available.
Components:
Formaldehyde No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.
Components:
Formaldehyde Inhalation - vapor: Respiratory system - Causes damage to organs.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.
Components:
Formaldehyde No data available.

Aspiration Hazard
Product: No data available.
Components:
Formaldehyde No data available.

11.2 Information on other hazards

Other information
Product: No data available.

SECTION 12: Ecological information

12.1 Toxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.
Components:

Formaldehyde LC 50 (Morone saxatilis, 96 h): 6.7 mg/l Experimental result, Key study

Aquatic Invertebrates
Product: No data available.

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Components:
Formaldehyde — EC 50 (Daphnia pulex, 48 h): 5.8 mg/l Experimental result, Key study experimental result

Toxicity to Aquatic Plants
Product: No data available.
Components:
Formaldehyde — EC 50 (Green algae (Scenedesmus subspicatus), 72 h): 4.89 mg/l

Toxicity to microorganisms
Product: No data available.
Components:
Formaldehyde — No data available.

Chronic hazards to the aquatic environment:

Fish
Product: No data available.
Components:
Formaldehyde — LC 50 (Danio rerio, 144 h): 6.9 mg/l (semi-static) Experimental result, Supporting study experimental result

Aquatic Invertebrates
Product: No data available.
Components:
Formaldehyde — LOAEL (Ceriodaphnia dubia, 7 d): 6 mg/l Experimental result, Not specified experimental result

Toxicity to Aquatic Plants
Product: No data available.
Components:
Formaldehyde — No data available.

Toxicity to microorganisms
Product: No data available.
Components:
Formaldehyde — No data available.

12.2 Persistence and Degradability

Biodegradation
Product: No data available.
Components:
Formaldehyde — Readily biodegradable
97 % (2 Weeks) Experimental result, Key study Detected in water.

BOD/COD Ratio
Product: No data available.
Components:
Formaldehyde — No data available.

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12.3 Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
Formaldehyde	Will not bio-accumulate.

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
Components:	
Formaldehyde	Log Kow: 0.35

12.4 Mobility in soil:

Product	No data available.
Components:	
Formaldehyde	No data available.

12.5 Results of PBT and vPvB assessment:

Product	No data available.
Components:	
Formaldehyde	Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria, Not fulfilling vPvB (very persistent/very bioaccummulative) criteria

12.6 Other adverse effects:

Other hazards

Product:	No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

General information:	Dispose of waste and residues in accordance with local authority requirements.
Disposal methods:	Discharge, treatment, or disposal may be subject to national, state, or local laws. Since emptied containers retain product residue, follow label warnings even after container is emptied.

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Contaminated Packaging:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

SECTION 14: Transport information

ADR

14.1 UN number or ID number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Hazard No. (ADR):	Not regulated.
Tunnel restriction code:	Not regulated.
14.4 Packing Group:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Environmental Hazards	Not regulated.
14.6 Special precautions for user:	Not regulated.

ADN

14.1 UN number or ID number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
Hazard No. (ADR):	Not regulated.
Tunnel restriction code:	Not regulated.
14.4 Packing Group:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Special precautions for user:	Not regulated.

RID

14.1 UN number or ID number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Environmental Hazards	Not regulated.
14.6 Special precautions for user:	Not regulated.

IMDG

14.1 UN number or ID number:	Not regulated.

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14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
EmS No.:	Not regulated.
14.4 Packing Group:	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Environmental Hazards	Not regulated.
14.6 Special precautions for user:	Not regulated.

IATA

14.1 UN number or ID number:	Not regulated.
14.2 UN Proper Shipping Name:	Not regulated.
14.3 Transport Hazard Class(es)	
Class:	Not regulated.
Label(s):	Not regulated.
14.4 Packing Group:	Not regulated.
Passenger and cargo aircraft :	Not regulated.
Limited quantity	Not regulated.
Excepted quantity	Not regulated.
14.5 Environmental Hazards	Not regulated.
14.6 Special precautions for user:	Not regulated.

14.7 Maritime transport in bulk according to IMO instruments
Not applicable for product as supplied.

SECTION 15: Regulatory information

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

EU Regulations

EU. REACH Annex XIV, Substances Subject to Authorization: None present or none present in regulated quantities.

EU. REACH Candidate List of Substances of Very High Concern for Authorization (SVHC): None present or none present in regulated quantities.

EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), as amended: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances: None present or none present in regulated quantities.

Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances: None present or none present in regulated quantities.

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances,

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Annex I:

Classification	Lower-tier Requirements	Upper-tier Requirements
H2. Acute toxic	5 t	50 t

15.2 Chemical safety assessment: No Chemical Safety Assessment has been carried out.

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

SECTION 16: Other information

Abbreviations and acronyms:

EH40 WEL: UK. EH40 Workplace Exposure Limits (WELs), as amended
EH40 WEL / STEL: Short Term Exposure Limit (STEL):
EH40 WEL / TWA: Time Weighted Average (TWA):

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; EIGA - European Industrial Gases Association; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS -

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Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Notes:

Note B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid...%'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Key literature references and sources for data: No data available.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 as amended.	**Classification procedure**
Skin irritation, Category 2	
Serious eye damage, Category 1	
Skin sensitizer, Category 1	On basis of test data
Germ Cell Mutagenicity, Category 2	On basis of test data
Carcinogenicity, Category 1B	On basis of test data

Wording of the statements in section 2 and 3

H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H401	Toxic to aquatic life.

Training information: No data available.

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Classification according to Regulation (EC) No 1272/2008 as amended.

Skin Irrit. 2, H315
Eye Dam. 1, H318
Skin Sens. 1, H317
Muta. 2, H341
Carc. 1B, H350

SDS No.: UN000000000000554655-4012-1-01

Disclaimer:

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