

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended

Formaldehyde Sample Buffer

Version 5.0

Revision Date: 31.01.2025

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

1.1 Product identifier

Product name : Formaldehyde Sample Buffer

Material number : 50571

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

Use of the Substance/Mixture : For research use only.

Recommended restrictions on use : NOT FOR USE IN GMP MANUFACTURING, NOR HUMAN OR ANIMAL IN VIVO OR DIAGNOSTIC USE.

1.3 Details of the supplier of the safety data sheet

Company : **Lonza Ltd**
Muenchensteinerstrasse 38
CH-4002 Basel, Switzerland
Business Telephone: +41 61 316 81 11

Lonza Verviers Sprl
Parc Industriel de Petit-Rechain
BE-4800 Verviers, Belgium
Business Telephone: +32 8732 1611

Lonza Cologne GmbH
Nattermannallee 1
DE-50829 Köln, Germany
Business Telephone: + 49 221 99 1990

E-mail address / Responsible/issuing person : sds@lonza.com

1.4 Emergency telephone number

Emergency telephone number : Lonza Ltd, CH-4002 Basel, Switzerland
Telephone: +41 61 313 94 94 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

(REGULATION (EC) No 1272/2008)

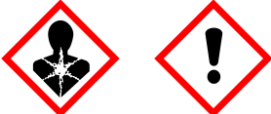
Acute toxicity, Category 4	H302: Harmful if swallowed.
Acute toxicity, Category 4	H332: Harmful if inhaled.
Acute toxicity, Category 4	H312: Harmful in contact with skin.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.

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Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, Category 2	H341: Suspected of causing genetic defects.
Carcinogenicity, Category 1B	H350: May cause cancer.
Reproductive toxicity, Category 1B	H360D: May damage the unborn child.
Specific target organ toxicity - single exposure, Category 2, Eyes	H371: May cause damage to organs.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	<p>H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled.</p> <p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H319 Causes serious eye irritation.</p> <p>H335 May cause respiratory irritation.</p> <p>H341 Suspected of causing genetic defects.</p> <p>H350 May cause cancer.</p> <p>H360D May damage the unborn child.</p> <p>H371 May cause damage to organs (Eyes).</p> <p>H373 May cause damage to organs through prolonged or repeated exposure.</p>
Precautionary statements	:	<p>Prevention:</p> <p>P201 Obtain special instructions before use.</p> <p>P260 Do not breathe mist or vapours.</p> <p>P264 Wash skin thoroughly after handling.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.</p> <p>Response:</p> <p>P302 + P352 + P312 IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.</p> <p>P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.</p>

Hazardous components which must be listed on the label:

Formamide
Formaldehyde
Methanol

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2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Formamide	75-12-7 200-842-0 616-052-00-8 01-2119496064-35-X XXX	Carc. 2; H351 Repr. 1B; H360D STOT RE 2; H373	>= 30 - < 50
Formaldehyde	50-00-0 200-001-8 605-001-00-5 01-2119488953-20-X XXX	Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1; H317 Muta. 2; H341 Carc. 1B; H350 specific concentration limit Skin Corr. 1B; H314 >= 25 % Skin Irrit. 2; H315 5 - < 25 % Eye Irrit. 2; H319 5 - < 25 % STOT SE 3; H335 >= 5 % Skin Sens. 1; H317 >= 0,2 % Acute toxicity estimate Acute oral toxicity: 100 mg/kg Acute inhalation toxicity (vapour): 3,1 mg/l Acute dermal toxicity:	>= 10 - < 20

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Methanol	67-56-1 200-659-6 603-001-00-X 01-2119433307-44-X XXX	270 mg/kg Flam. Liq. 2; H225 Acute Tox. 3; H301 Acute Tox. 3; H331 Acute Tox. 3; H311 STOT SE 1; H370 (Eyes) <hr/> specific concentration limit STOT SE 1; H370 >= 10 % STOT SE 2; H371 3 - < 10 %	>= 3 - < 10
Sodium dodecyl sulphate SDS	151-21-3 205-788-1 01-2119489461-32-X XXX	Flam. Sol. 2; H228 Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 (Respiratory system) Aquatic Chronic 3; H4120 - < 10 % <hr/> specific concentration limit ED 2; H319 10 - < 20 % ED 1; H318 >= 20 % <hr/> Acute toxicity estimate Acute oral toxicity: 1 290 mg/kg	>= 0,0025 - < 0,025

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- If inhaled : Move to fresh air.
Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.
Keep respiratory tract clear.
If breathing is irregular or stopped, administer artificial respiration.
- In case of skin contact : After contact with skin, wash immediately with plenty of soap and water.
If on clothes, remove clothes.
In the case of skin irritation or allergic reactions see a physician.

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- In case of eye contact : Rinse immediately with plenty of lukewarm water, also under the eyelids, for at least 15 minutes.
Call a physician immediately.
Remove contact lenses.
Keep eye wide open while rinsing.
Protect unharmed eye.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.
- Risks : Harmful if swallowed, in contact with skin or if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.
Suspected of causing genetic defects.
May cause cancer.
May damage the unborn child.
May cause damage to organs.
May cause damage to organs through prolonged or repeated exposure.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during firefighting : Heating or fire can release toxic gas.
- Hazardous combustion products : Nitrogen oxides (NO_x)
Ammonia
Carbon oxides (CO_x)
Formaldehyde

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.
- Specific extinguishing methods : Standard procedure for chemical fires.
- Further information : Use water spray to cool unopened containers.
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Use a water spray to cool fully closed containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Use respirator when performing operations involving potential exposure to vapour of the product.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For personal protection see section 8.
For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of aerosol.
Avoid exposure - obtain special instructions before use.
Do not breathe vapours/dust.
Avoid contact with skin and eyes.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
Provide sufficient air exchange and/or exhaust in work rooms.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Observe label precautions. Keep container tightly closed. Keep in a well-ventilated place. To maintain product quality, do not store in heat or direct sunlight.

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

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Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Countries not listed may have their own country specific values.

Occupational Exposure Limits

European Union

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Formaldehyde	50-00-0	TWA	0,3 ppm 0,37 mg/m ³	2004/37/EC
Further information	Dermal sensitisation, Carcinogens or mutagens			
		STEL	0,6 ppm 0,74 mg/m ³	2004/37/EC
Further information	Dermal sensitisation, Carcinogens or mutagens			
Methanol	67-56-1	TWA	200 ppm 260 mg/m ³	2006/15/EC
Further information	Indicative, Identifies the possibility of significant uptake through the skin			

Switzerland

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Formamide	75-12-7	TWA	10 ppm 18 mg/m ³	CH SUVA
Formaldehyde	50-00-0	TWA	0,3 ppm 0,37 mg/m ³	2004/37/EC
		STEL	0,6 ppm 0,74 mg/m ³	2004/37/EC
		TWA	0,3 ppm 0,37 mg/m ³	CH SUVA
		STEL	0,6 ppm 0,74 mg/m ³	CH SUVA
Methanol	67-56-1	TWA	200 ppm 260 mg/m ³	2006/15/EC
		TWA	200 ppm 260 mg/m ³	CH SUVA
		STEL	400 ppm 520 mg/m ³	CH SUVA

Biological occupational exposure limits

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Formaldehyde	Workers	Inhalation	Long-term systemic effects	9 mg/m ³
	Workers	Dermal	Long-term local effects	0,037 mg/cm ²
	Workers	Dermal	Long-term systemic effects	240 mg/kg

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	Workers	Inhalation	Acute local effects	1,0 mg/m3
	Workers	Inhalation	Long-term local effects	0,5 mg/m3
	Consumers	Oral	Long-term systemic effects	4,1 mg/kg
	Consumers	Dermal	Long-term local effects	0,012 mg/cm2
	Consumers	Dermal	Long-term systemic effects	102 mg/kg
	Consumers	Inhalation	Long-term local effects	0,1 mg/m3
	Consumers	Inhalation	Long-term systemic effects	3,2 mg/m3
Methanol	Workers	Dermal	Acute systemic effects	40 mg/kg
	Workers	Inhalation	Acute systemic effects	260 mg/m3
	Workers	Inhalation	Acute local effects	260 mg/m3
	Workers	Dermal	Long-term systemic effects	40 mg/kg
	Workers	Inhalation	Long-term local effects	260 mg/m3
	Workers	Inhalation	Long-term systemic effects	260 mg/m3
	Consumers	Dermal	Acute systemic effects	8 mg/kg
	Consumers	Inhalation	Acute systemic effects	50 mg/m3
	Consumers	Oral	Acute systemic effects	8 mg/kg
	Consumers	Inhalation	Long-term local effects	50 mg/m3
	Consumers	Oral	Long-term systemic effects	8 mg/kg
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
	Consumers	Dermal	Long-term systemic effects	8 mg/kg
	Consumers	Inhalation	Acute local effects	50 mg/m3
Sodium dodecyl sulphate	Workers	Dermal	Long-term systemic effects	4060 mg/kg
	Consumers	Oral	Long-term systemic effects	24 mg/kg
	Consumers	Inhalation	Long-term systemic effects	85 mg/m3
	Consumers	Dermal	Long-term systemic effects	2440 mg/kg
	Workers	Inhalation	Long-term systemic effects	285 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Formaldehyde	Fresh water	0,47 mg/l
	Soil	0,21 mg/kg
	Marine sediment	2,44 mg/kg
	Fresh water sediment	2,44 mg/kg
	Sewage treatment plant	0,19 mg/l
	Intermittent use/release	4,7 mg/l
	Marine water	0,47 mg/l
Methanol	Fresh water	154 mg/l
	Marine water	15,4 mg/l
	Sediment	570,4 mg/kg
	Soil	23,5 mg/kg
	Sewage treatment plant	100 mg/l
Sodium dodecyl sulphate	Intermittent use/release	1540 mg/l
	Fresh water	0,137 mg/l
	Soil	0,882 mg/kg

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	Marine sediment	0,482 mg/kg
	Fresh water sediment	4,82 mg/kg
	Sewage treatment plant	1084 mg/l
	Intermittent use/release	0,055 mg/l
	Marine water	0,0137 mg/l

8.2 Exposure controls

Engineering measures

Avoid splashes.

Personal protective equipment

Eye protection : Safety goggles

Hand protection

Material : Nitrile rubber

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
Impervious gloves Break through time : > 480 min
The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Impervious clothing

Respiratory protection : Respirator with a vapour filter (EN 141)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Appearance : Aqueous solution

Colour : No data available

Odour : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling range : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

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Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : 6 - 8

Viscosity
Viscosity, kinematic : No data available

Solubility(ies)
Water solubility : completely soluble

Partition coefficient:
n-octanol/water : No data available

Vapour pressure : No data available

Density : No data available

Relative vapour density : No data available

9.2 Other information

No data available

SECTION 10: Stability and reactivity**10.1 Reactivity**

No decomposition if stored and applied as directed.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.
No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : Keep away from heat and sources of ignition.

Heat

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

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Strong acids and strong bases

10.6 Hazardous decomposition products

No decomposition if used as directed.

Hazardous decomposition products : Hydrogen cyanide

SECTION 11: Toxicological information**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**Acute oral toxicity : Acute toxicity estimate: 644,75 mg/kg
Method: Calculation methodAcute inhalation toxicity : Acute toxicity estimate: 19,34 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation methodAcute dermal toxicity : Acute toxicity estimate: 1 793 mg/kg
Method: Calculation method**Skin corrosion/irritation**

Remarks : No data available

Serious eye damage/eye irritation

Remarks : No data available

Respiratory or skin sensitisation

Remarks : No data available

Germ cell mutagenicity

Genotoxicity in vitro : Remarks: No data available

Carcinogenicity

Remarks : No data available

Carcinogenicity - Assessment : May cause cancer.

Reproductive toxicity

Effects on fertility : Remarks: No data available

Reproductive toxicity - Assessment : May cause harm to the unborn child.

STOT - single exposure

Remarks : No data available

STOT - repeated exposure

Remarks : No data available

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Aspiration toxicity

No aspiration toxicity classification

11.2 Information on other hazards**Endocrine disrupting properties**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Remarks : No data available

The following toxicological data refer to:**Formamide (CAS-No.: 75-12-7)****Acute toxicity**

Acute oral toxicity : LD50 (Rat): 5 800 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 21 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): 17 000 mg/kg

Skin corrosion/irritation

Species : Rabbit
Assessment : No skin irritation
Result : No skin irritation

Serious eye damage/eye irritation

Species : Rabbit
Assessment : No eye irritation
Result : No eye irritation

Respiratory or skin sensitisation

Species : Guinea pig
Result : not sensitizing

Germ cell mutagenicity

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: yes
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

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Carcinogenicity

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies (oral)

STOT - repeated exposure

Exposure routes : Inhalation, Skin contact, Ingestion

Target Organs : Cardio-vascular system

Assessment : May cause damage to organs through prolonged or repeated exposure.

Formaldehyde (CAS-No.: 50-00-0)

Acute toxicity

Acute oral toxicity : LD50 (Rat): 100 mg/kg

Acute toxicity estimate: 100 mg/kg

Method: ATE value derived from LD50/LC50 value

Acute inhalation toxicity : Acute toxicity estimate: 3,1 mg/l

Exposure time: 4 h

Test atmosphere: vapour

Method: Calculation method

Acute dermal toxicity : LD50 (Rabbit): 270 mg/kg

Acute toxicity estimate: 270 mg/kg

Method: ATE value derived from LD50/LC50 value

Skin corrosion/irritation

Species : Rabbit

Assessment : Causes burns.

Result : Severe skin irritation

Serious eye damage/eye irritation

Species : Rabbit

Assessment : Risk of serious damage to eyes.

Result : Severe eye irritation

Respiratory or skin sensitisation

Species : Guinea pig

Assessment : Causes sensitisation.

Result : Sensitising

Germ cell mutagenicity

Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Method: OECD Test Guideline 471
Result: positive
GLP: yes

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster ovary cells

Result: positive

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GLP: yes

Test Type: gene mutation test
Test system: mouse lymphoma cells
Result: positive**Methanol** (CAS-No.: 67-56-1)**Acute toxicity**

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Skin corrosion/irritation

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Remarks : No data available

Respiratory or skin sensitisation

Species : Guinea pig

Result : not sensitizing

Germ cell mutagenicityGenotoxicity in vitro : Test Type: gene mutation test
Test system: mouse lymphoma cells
Result: negative**Reproductive toxicity**Effects on fertility : Species: Rat
General Toxicity - Parent: NOAEL: 1,33 mg/lEffects on foetal development : Species: Rat
Teratogenicity: NOAEL: 1,3 mg/l**STOT - single exposure**

Target Organs : Eyes

Assessment : Causes damage to organs.

STOT - repeated exposure

Remarks : No data available

SECTION 12: Ecological information**12.1 Toxicity**

Toxicity to fish : Remarks: No data available

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12.2 Persistence and degradability

Biodegradability : Remarks: No data available

12.3 Bioaccumulative potential

Bioaccumulation : Remarks: No data available

12.4 Mobility in soil

Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Additional ecological information : No data available

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product : Dispose of contents/container in accordance with local regulation.
Contact waste disposal services.
Do not dispose of waste into sewer.

Contaminated packaging : Dispose of as unused product.
Do not re-use empty containers.

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SECTION 14: Transport information**IATA**

14.1	UN number	:	3334
14.2	Proper shipping name	:	Aviation regulated liquid, n.o.s. (Formaldehyde)
14.3	Transport hazard class(es)	:	9
14.4	Packing group	:	III
	Labels	:	9
14.5	Environmental hazards	:	no

IMDG

Not dangerous goods

14.1	UN number	:	Not applicable
14.2	Proper shipping name	:	Not applicable
14.3	Transport hazard class(es)	:	Not applicable
14.4	Packing group	:	Not applicable
14.5	Environmental hazards	:	Marine pollutant: no

ADR

Not dangerous goods

14.1	UN number	:	Not applicable
14.2	Proper shipping name	:	Not applicable
14.3	Transport hazard class(es)	:	Not applicable
14.4	Packing group	:	Not applicable
14.5	Environmental hazards	:	no

RID

Not dangerous goods

14.1	UN number	:	Not applicable
14.2	Proper shipping name	:	Not applicable
14.3	Transport hazard class(es)	:	Not applicable
14.4	Packing group	:	Not applicable
14.5	Environmental hazards	:	no

DOT

: Not dangerous goods

14.1	UN number	:	Not applicable
14.2	Proper shipping name	:	Not applicable
14.3	Transport hazard class(es)	:	Not applicable
14.4	Packing group	:	Not applicable

TDG

: Not dangerous goods

14.1	UN number	:	Not applicable
14.2	Proper shipping name	:	Not applicable
14.3	Transport hazard class(es)	:	Not applicable
14.4	Packing group	:	Not applicable
14.5	Environmental hazards	:	no

14.6 Special precautions for user

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The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Not applicable
International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Formamide
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Council Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors	:	Neither banned nor restricted
SIN (Substitute it Now!) List (ChemSec)	:	Formamide Formaldehyde
Community rolling action plan (CORAP) List of Substances	:	Formaldehyde Methanol
EU Dual-Use export controls regulation 2021/821 (Annex I, 1C350 and 1C450) as amended	:	Not applicable
Council Regulation (EC) No 273/2004 on drug precursors	:	Not applicable
U.S. EPA PFAS List of Lists	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	22	Methanol
Water hazard class (Germany)	:	WGK 3 highly hazardous to water Classification according to AwSV,

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Annex 1 (5.2)

15.2 Chemical safety assessment

not required

SECTION 16: Other information

Full text of H-Statements

H225	: Highly flammable liquid and vapour.
H228	: Flammable solid.
H301	: Toxic if swallowed.
H302	: Harmful if swallowed.
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.
H331	: Toxic if inhaled.
H332	: Harmful if inhaled.
H335	: May cause respiratory irritation.
H341	: Suspected of causing genetic defects.
H350	: May cause cancer.
H351	: Suspected of causing cancer if swallowed.
H360D	: May damage the unborn child.
H370	: Causes damage to organs.
H373	: May cause damage to organs through prolonged or repeated exposure.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Carc.	: Carcinogenicity
Eye Dam.	: Serious eye damage
Flam. Liq.	: Flammable liquids
Flam. Sol.	: Flammable solids
Muta.	: Germ cell mutagenicity
Repr.	: Reproductive toxicity
Skin Corr.	: Skin corrosion
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitisation
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure
2004/37/EC	: Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens, mutagens or reprotoxic substances at work - Annex III
2006/15/EC	: Europe. Indicative occupational exposure limit values
CH SUVA	: Switzerland. Limit values at the work place

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; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -

Formaldehyde Sample Buffer

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 - 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; TECl - 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

Further information

Other information : This Safety Data Sheet is a generic European Safety Data Sheet and therefore does not contain all specific information for each European country.

Date format : dd.mm.yyyy

Classification of the mixture:

Acute Tox. 4	H302
Acute Tox. 4	H332
Acute Tox. 4	H312
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Skin Sens. 1	H317
Muta. 2	H341
Carc. 1B	H350
Repr. 1B	H360D
STOT SE 2	H371
STOT SE 3	H335
STOT RE 2	H373

Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method
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Calculation method

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