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

DES-F (BE2024-0021) - CAN 20KG

Version 1.0 Print Date 15.09.2026

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

1.1. Product identifier

Trade name	:	DES-F (BE2024-0021) - CAN 20KG
UFI	:	W3UP-E15T-T007-8C89
UFI code notified in	:	Belgium, Germany, Denmark, Estonia, Spain, Croatia, Ireland, Iceland, Lithuania, Luxembourg, Latvia, Malta, Netherlands, Norway, Portugal, Sweden

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

Use of the Substance/Mixture	:	Biocidal product, Professional use, Veterinary hygiene biocidal products
Uses advised against	:	At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company	:	Brenntag N.V. Nijverheidslaan 38 BE 8540 Deerlijk
Telephone	:	+32 (0)56 77 6944
Telefax	:	+32 (0)56 77 5711
E-mail address	:	info@brenntag.be
Responsible/issuing person	:	Master Data Administration
Company	:	Brenntag Nederland B.V. Donker Duyvisweg 44 NL 3316 BM Dordrecht
Telephone	:	+31 (0)78 65 44 944
Telefax	:	+31 (0)78 65 44 919
E-mail address	:	info@brenntag.nl
Responsible/issuing person	:	Master Data Administration

1.4. Emergency telephone number

Emergency telephone number	:	Belgium: Antipoison Center - Brussels TEL: +32(0)70 245 245 Netherland: National Poisoning Information Center - Bilthoven TEL: +31(0) 88 755 8000 (Only for the purpose of informing

medical personnel in cases of acute intoxications)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	**Hazard category**	**Target Organs**	**Hazard statements**
Acute toxicity (Oral)	Category 3	---	H301
Acute toxicity (Dermal)	Category 3	---	H311
Skin corrosion	Sub-category 1B	---	H314
Skin sensitisation	Category 1	---	H317
Serious eye damage	Category 1	---	H318
Acute toxicity (Inhalation)	Category 3	---	H331
Specific target organ toxicity - single exposure	Category 3	Respiratory system	H335
Germ cell mutagenicity	Category 2	---	H341
Carcinogenicity	Category 1B	---	H350

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health : No further information available.

Physical and chemical hazards : No further information available.

Potential environmental effects : No further information available.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard symbols :

Signal word : Danger

Hazard statements : 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.
		H331	Toxic if inhaled.
		H341	Suspected of causing genetic defects.
		H350	May cause cancer (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Precautionary statements			
Prevention	:	P201	Obtain special instructions before use.
		P202	Do not handle until all safety precautions have been read and understood.
		P260	Do not breathe gas.
		P270	Do not eat, drink or smoke when using this product.
		P280	Wear protective clothing (DIN EN 374)/ eye protection/ face protection(DIN EN 14605).
Response	:	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
		P302 + P352	IF ON SKIN: Wash with plenty of water/soap.
		P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
		P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
		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.
Storage	:	P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
		P405	Store locked up.
Disposal	:	P501	Dispose of contents/container according to hazardous waste regulation.

Additional Labelling:

EUH071 Corrosive to the respiratory tract.

Hazardous components which must be listed on the label:

- formaldehyde
- methanol

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

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
formaldehyde			
Index-No. : 605-001-00-5 CAS-No. : 50-00-0 EC-No. : 200-001-8 EU REACH-Reg. No. : 01-2119488953-20-xxxx	>= 30 - < 50	Acute Tox.4 Oral Acute Tox.2 Inhalation Skin Corr.1B Skin Sens.1A Muta.2 Carc.1B --- specific concentration limit Skin Irrit. 2; H315 5 - < 25 % Eye Irrit. 2; H319 5 - < 25 % Skin Corr. 1B; H314 >= 25 % STOT SE 3; H335 >= 5 % --- Acute toxicity estimate Acute oral toxicity: 640 mg/kg Acute inhalation toxicity (vapour): 0,5 mg/l --- Note B Note D Note F	H302 H330 H314 H317 H341 H350 --- EUH071
methanol			
Index-No. : 603-001-00-X CAS-No. : 67-56-1 EC-No. : 200-659-6 EU REACH-Reg. No. : 01-2119433307-44-xxxx	>= 3 - < 10	Flam. Liq.2 Acute Tox.3 Inhalation Acute Tox.3 Dermal Acute Tox.3 Oral STOT SE1 --- specific concentration limit STOT SE 2; H371 3 - < 10 % STOT SE 1; H370 >= 10 %	H225 H331 H311 H301 H370

	Acute toxicity estimate Acute oral toxicity: 100 mg/kg Acute inhalation toxicity (vapour): 3 mg/l Acute dermal toxicity: 300 mg/kg

For the full text of the H-Statements mentioned in this Section, see Section 16.
For the full text of the Notes mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: First aider needs to protect himself. Remove from exposure, lie down. Take off all contaminated clothing immediately.
If inhaled	: Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Oxygen, if needed. No artificial respiration, mouth-to-mouth or mouth to nose. Use suitable instruments/apparatus. Call a physician immediately.
In case of skin contact	: Wash off immediately with soap and plenty of water. Call a physician immediately.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	: See Section 11 for more detailed information on health effects and symptoms.;
Effects	: Extremely corrosive and destructive to tissue. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. See Section 11 for more detailed information on health effects and symptoms. Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Fatal if inhaled. May cause respiratory irritation. Suspected of causing genetic defects. May cause cancer. May cause damage to organs. Causes severe burns. Corrosive to the respiratory tract.

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

Treatment	:	Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	:	High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	:	Incomplete combustion may form toxic pyrolysis products.
Hazardous combustion products	:	Carbon monoxide, Carbon dioxide (CO2), The formation of caustic fumes is possible.

5.3. Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.Wear appropriate body protection (full protective suit)
Specific extinguishing methods	:	Control smoke with water spray.
Further advice	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains.Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Keep away unprotected persons. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist.

6.2. Environmental precautions

Environmental precautions	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up	:	Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal.
Further information	:	Treat recovered material as described in the section "Disposal

considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	:	Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.
Hygiene measures	:	Keep away from food, drink and animal feeding stuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. Keep working clothes separately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons.
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Further information on storage conditions	:	Keep tightly closed in a dry and cool place. Keep in a well-ventilated place.
Advice on common storage	:	Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Specific use(s)	:	No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Component:	**formaldehyde**	**CAS-No. 50-00-0**
EU Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)		

DNEL
Workers, Long-term - systemic effects, Inhalation : 9 mg/m3

DNEL
Workers, Long-term - local effects, Inhalation : 0,375 mg/m3

DNEL
Workers, Acute - local effects, Inhalation : 0,75 mg/m3

DNEL
Workers, Long-term - systemic effects, Dermal : 240 mg/kg bw/day

DNEL
Workers, Long-term - local effects, Dermal : 0,037 mg/cm2

DNEL
Consumers, Long-term - systemic effects, Inhalation : 3,2 mg/m3

DNEL
Consumers, Long-term - local effects, Inhalation : 0,1 mg/m3

DNEL
Consumers, Long-term - systemic effects, Dermal : 102 mg/kg bw/day

DNEL
Consumers, Long-term - local effects, Dermal : 0,012 mg/cm2

DNEL
Consumers, Long-term - systemic effects, Oral : 4,1 mg/kg bw/day

EU Predicted No Effect Concentration (PNEC)

Fresh water :
No hazard identified

Marine water :
No hazard identified

Sewage treatment plant (STP) :
no emission to STP expected

Fresh water sediment :
no exposure of sediment expected

Marine sediment :
no exposure of sediment expected

Soil :
no exposure of soil expected

Secondary poisoning :

no potential for bioaccumulation

Other Occupational Exposure Limit Values

Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended, Ceiling Limit Value:
0,3 ppm, 0,38 mg/m3

EU. OELs for Certain Carcinogens, Mutagens, Reprotoxins: Annex III, Directive 2004/37/EC (CMRD), as amended, Short Term Exposure Limit (STEL):
0,6 ppm

EU. OELs for Certain Carcinogens, Mutagens, Reprotoxins: Annex III, Directive 2004/37/EC (CMRD), as amended, Time Weighted Average (TWA):
0,3 ppm, 0,37 mg/m3

EU. OELs for Certain Carcinogens, Mutagens, Reprotoxins: Annex III, Directive 2004/37/EC (CMRD), as amended, Short Term Exposure Limit (STEL):
0,74 mg/m3

Netherlands. OELs (binding) per Annex XIII of Working Conditions Regulation, as amended, Time Weighted Average (TWA):
0,12 ppm, 0,15 mg/m3
Section B: List of Carcinogens

Netherlands. OELs (binding) per Annex XIII of Working Conditions Regulation, as amended, Short Term Exposure Limit (STEL):
0,41 ppm, 0,5 mg/m3, (15 minutes)
Section B: List of Carcinogens

EU. OELs for Certain Carcinogens, Mutagens, Reprotoxins: Annex III, Directive 2004/37/EC (CMRD), as amended, Short Term Exposure Limit (STEL):
0,6 ppm

EU. OELs for Certain Carcinogens, Mutagens, Reprotoxins: Annex III, Directive 2004/37/EC (CMRD), as amended, Time Weighted Average (TWA):
0,3 ppm, 0,37 mg/m3

EU. OELs for Certain Carcinogens, Mutagens, Reprotoxins: Annex III, Directive 2004/37/EC (CMRD), as amended, Short Term Exposure Limit (STEL):
0,74 mg/m3

Component: methanol CAS-No. 67-56-1

EU Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, short-term, Long-term - systemic effects, Skin contact : 20 mg/kg bw/day
DNEL
Workers, short-term, Long-term - systemic effects, Inhalation : 130 mg/m3
DNEL

Workers, short-term, Long-term - local effects, Inhalation	:	130 mg/m3
DNEL		
Consumers, short-term, Long-term - systemic effects, Skin contact	:	4 mg/kg bw/day
DNEL		
Consumers, short-term, Long-term - systemic effects, Inhalation	:	26 mg/m3
DNEL		
Consumers, short-term, Long-term - systemic effects, Ingestion	:	4 mg/kg bw/day
DNEL		
Consumers, short-term, Long-term - local effects, Inhalation	:	26 mg/m3

EU Predicted No Effect Concentration (PNEC)

Fresh water	:	20 mg/l
Marine water	:	2,08 mg/l
Sewage treatment plant (STP)	:	100 mg/l
Marine sediment	:	7,7 mg/kg dry weight (d.w.)
Soil	:	100 mg/kg wwt

Other Occupational Exposure Limit Values

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
200 ppm, 260 mg/m3
Indicative

Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended, Time Weighted Average (TWA):
200 ppm, 266 mg/m3

Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended, Skin designation:
Can be absorbed through the skin.

Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended, Short Term Exposure Limit (STEL):
250 ppm, 333 mg/m3, (15 minutes)

Netherlands. OELs (binding) per Annex XIII of Working Conditions Regulation, as amended, Skin designation:
Can be absorbed through the skin.

Netherlands. OELs (binding) per Annex XIII of Working Conditions Regulation, as amended, Time Weighted Average (TWA):

133 mg/m3

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA):
200 ppm, 260 mg/m3
Indicative

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice	:	In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use self-contained breathing apparatus. Respiratory protection complying with EN 141.

Hand protection

Advice	:	Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear.

Eye protection

Advice	:	Safety goggles Face-shield

Skin and body protection

Protecting Clothes	:	Impervious clothing Chemical resistant apron

Environmental exposure controls

General advice	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	:	No data available
Physical state	:	liquid
Colour	:	colourless clear
Odour	:	formaldehyde-like, strong
Odour Threshold	:	< 0,1 ppm
Freezing point/range	:	> -9 °C
Boiling point/boiling range	:	95 - 96 °C (1013,0 hPa)
Flammability	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	>= 64 °C
Auto-ignition temperature	:	ca. 395 °C
Decomposition temperature	:	No data available
Self-Accelerating decomposition temperature (SADT)	:	No data available
pH	:	2,8 - 4,0 Concentration: 100 %
Viscosity		
Viscosity, dynamic	:	2,2 mPa.s (20 °C)
Viscosity, kinematic	:	< 3 mm2/s (20 °C)
Flow time	:	No data available
Solubility(ies)		
Water solubility	:	soluble
Solubility in other solvents	:	No data available
Dissolution Rate	:	No data available
Partition coefficient: n-octanol/water	:	log Pow: 0,35 (20 °C) Formaldehyde log Pow: -0,77 (20 °C) Methanol
Dispersion Stability	:	No data available
Vapour pressure	:	not determined

Relative density	:	Not determined.
Density	:	1,090 - 1,100 g/cm3
Bulk density	:	No data available
Relative vapour density	:	No data available
Particle characteristics Particle size	:	Not applicable

9.2 Other information

Explosives	:	Not applicable
Oxidizing properties	:	not oxidising

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No specific test data related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Advice : Polymerizes at temperatures below the recommended storage temperature. Polymer precipitation can occur when cooling.

10.3. Possibility of hazardous reactions

Hazardous reactions : Exothermic reaction with: Amines Ammonia Phenol

10.4. Conditions to avoid

Conditions to avoid : No specific data.

10.5. Incompatible materials

Materials to avoid : Amines, Ammonia, Phenol

10.6. Hazardous decomposition products

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Data for the product
Acute toxicity

Oral

Acute toxicity estimate	:	785,08 mg/kg) (Calculation method)Harmful if swallowed.

Inhalation

Acute toxicity estimate	:	1,28 mg/l (4 h; vapour) (Calculation method)Toxic if inhaled.

Dermal

Acute toxicity estimate	:	> 2000 mg/kg) (Calculation method)Based on available data, the classification criteria are not met.

Irritation

Skin

Result	:	Causes severe skin burns and eye damage.

Eyes

Result	:	Causes serious eye damage.

Sensitisation

Result	:	May cause an allergic skin reaction.

CMR effects

CMR Properties

Carcinogenicity	:	May cause cancer.
Mutagenicity	:	Suspected of causing genetic defects.
Teratogenicity	:	Based on available data, the classification criteria are not met.
Reproductive toxicity	:	No data available

Specific Target Organ Toxicity

Single exposure

Remarks	:	May cause damage to organs.

Repeated exposure

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

Other toxic properties

Repeated dose toxicity

No data available

Aspiration hazard

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

Component:	formaldehyde	CAS-No. 50-00-0
Acute toxicity		
Oral		
LD50	:	640 mg/kg (Rat, male) (OECD Test Guideline 401)in 2 ÷ 4% solution
Inhalation		
LC50	:	463 ppm (Rat, male and female) (OECD Test Guideline 403)
Dermal		
		study scientifically not necessary
Irritation		
Skin		
Result	:	Corrosive (Rabbit; Causes severe skin burns and eye damage.) (OECD Test Guideline 404)
Eyes		
Result	:	Risk of serious damage to eyes.
Sensitisation		
Result	:	The product is a skin sensitiser, sub-category 1B. (Local lymph node assay (LLNA); Mouse) The product is a skin sensitiser, sub-category 1B. (Buehler Test; Guinea pig)
CMR effects		
Carcinogenicity		
		(positive, Humans, male and female; Test substance: Formaldehyde)(Target Organs: Respiratory system)(inhalation (vapour); 10 years)
CMR Properties		
Carcinogenicity	:	May cause cancer.
Mutagenicity	:	Suspected of causing genetic defects.

Teratogenicity	:	It is not considered teratogenic.
Reproductive toxicity	:	No human reproductive toxicity data available.

Genotoxicity in vitro

Result	:	positive (DNA Repair; Test substance: Formaldehyde)

Genotoxicity in vivo

Result	:	(DNA adduct formation; Rat) (inhalation (vapour); 0.7 - 15.2)

Teratogenicity

NOAEC Maternal	:	5 ppm
NOAEC Embryo-Fetal	:	10 ppm (Prenatal Developmental Toxicity Study; Rat, Sprague-Dawley)(inhalation (gas); 2 - 10 ppm; 6 h)(OECD Test Guideline 414)negative

Specific Target Organ Toxicity

Single exposure

Remarks	:	The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

No aspiration toxicity classification,

Component: methanol CAS-No. 67-56-1

Acute toxicity

Oral

Toxic if swallowed.

Inhalation

Toxic if inhaled.

Dermal

Toxic in contact with skin.

Irritation

Skin

Result	:	No skin irritation (Rabbit) (BASF - Test)

Eyes

Result	:	No eye irritation (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result	:	not sensitizing (Maximisation Test; Guinea pig) (OECD Test Guideline 406)

CMR effects

CMR Properties

Carcinogenicity	:	Animal testing did not show any carcinogenic effects.
Mutagenicity	:	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects
Teratogenicity	:	Not classified due to data which are conclusive although insufficient
Reproductive toxicity	:	Not classified due to data which are conclusive although insufficient

Genotoxicity in vivo

Result	:	negative (in vivo assay; Mammalian-Animal)

Teratogenicity

NOAEL Teratog.	:	1,3 mg/L (Rat)
NOAEL Teratog.	:	2,39 mg/L (Monkey)

Reproductive toxicity

NOAEL Parent	:	1,33 mg/L (Rat)

Specific Target Organ Toxicity

Single exposure

Remarks	:	Target Organs: Eyes, Central nervous systemCauses damage to organs.Experience with human exposure

Repeated exposure

Remarks	:	The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Repeated dose toxicity

LOAEL	:	2340 mg/kg bw/day (Monkey, male)(Oral) (No guideline available); Subacute toxicity
NOAEL	:	1,06 mg/l (Rat)(Inhalation)

Aspiration hazard

No aspiration toxicity classification,

Further information

Other relevant toxicity information	:	Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Danger by skin absorption. Effects due to ingestion may include: Risk of blindness! Vomiting Nausea Coma

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties

Assessment Endocrine Disrupting Properties	:	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.

Component:	formaldehyde	CAS-No. 50-00-0
Endocrine disrupting properties		
Assessment Endocrine Disrupting Properties	:	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.

Component:	methanol	CAS-No. 67-56-1
Endocrine disrupting properties		
Assessment Endocrine Disrupting Properties	:	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 12: Ecological information

12.1. Toxicity

Data for the product		
Acute toxicity		
Short-term (acute) aquatic hazard		
Result	:	Based on available data, the classification criteria are not met.
Chronic toxicity		
Long-term (chronic) aquatic hazard		
Result	:	Based on available data, the classification criteria are not met.

Component:	formaldehyde	CAS-No. 50-00-0
Acute toxicity		
Fish		

LC50	:	6,18 mg/l (Morone saxatilis (striped bass); 96 h)

Toxicity to daphnia and other aquatic invertebrates

EC50	:	5,8 mg/l (Daphnia pulex (Water flea); 48 h)

algae

EC50	:	3,48 mg/l (Desmodesmus subspicatus (green algae); 72 h)

Bacteria

EC50	:	20 mg/l (Microorganisms)
EC50		74,7 mg/l (sediment organisms; 3 min)

Chronic toxicity

Fish

LC50	:	6,9 mg/l (Danio rerio (zebra fish); 6 d)
NOEC		48 mg/l (Oryzias latipes (Japanese medaka); 28 d)

Aquatic invertebrates

NOEC	> 6,4 mg/l (Daphnia magna (Water flea); 21 d)

Component:	**methanol**	**CAS-No. 67-56-1**

Acute toxicity

Fish

LC50	:	15.400 mg/l (Lepomis macrochirus; 96 h) (flow-through test; EPA 600/3-75/009)

Toxicity to daphnia and other aquatic invertebrates

EC50	:	> 1.000 mg/l (Daphnia magna (Water flea); 48 h) (OECD Test Guideline 202)

algae

EC50	:	22000 mg/l (Pseudokirchneriella subcapitata (green algae); 96 h)

Bacteria

EC50	:	20000 mg/l (Bacteria; 15 h)
IC50		1000 mg/l (Bacteria; 24 h)
IC50		> 1000 mg/l (activated sludge; 3 h)

Chronic toxicity

Fish

NOEC	:	7900 mg/l (Fish; 200 h)

12.2. Persistence and degradability

Data for the product

Persistence and degradability

Biodegradability

Result	:	Readily biodegradable

Component:	**formaldehyde**	**CAS-No. 50-00-0**

Persistence and degradability

Persistence

Result	:	(Related to: Hydrolysis) The hydrolysis of the substance is not expected due to its structure.

Biodegradability

Result	:	91 % (Related to: Total organic carbon (TOC); Exposure Time: 14 d)(OECD Test Guideline 301C)Biodegradable

Component:	**methanol**	**CAS-No. 67-56-1**

Persistence and degradability

Persistence

Result	:	study scientifically unjustified

Biodegradability		
Result	:	97 % (Marine water; Exposure Time: 20 d)Readily biodegradable.
Result	:	95 % (Fresh water; Exposure Time: 20 d)
Result	:	83 - 91 % (Fresh water sediment; Exposure Time: 3 d)
Result	:	71,5 % (Fresh water; Exposure Time: 5 d)
Result	:	69 % (Marine water; Exposure Time: 5 d)
Result	:	46,3 - 53,5 % (Soil; Exposure Time: 5 d)

12.3. Bioaccumulative potential

Data for the product		
Bioaccumulation		
Result	:	The product has low potential bioaccumulation.

Component:	formaldehyde	CAS-No. 50-00-0
Bioaccumulation		
Result	:	log Kow 0,35 (ca. 25 °C)
	:	Low bioaccumulative potential

Component:	methanol	CAS-No. 67-56-1
Bioaccumulation		
Result	:	log Kow -0,77
	:	BCF: < 10; The product has low potential bioaccumulation.

12.4. Mobility in soil

Data for the product		
Mobility		
Result	:	No data available

Component:	formaldehyde	CAS-No. 50-00-0
Mobility		
Water	:	The product is water soluble.
Soil	:	Adsorption to solid soil phase is not expected.
Air	:	Volatile.

Component:	methanol	CAS-No. 67-56-1

Mobility

: The product is mobile in water enviroment.

12.5. Results of PBT and vPvB assessment

Data for the product
Results of PBT and vPvB assessment

Result : 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.

Component:	formaldehyde	CAS-No. 50-00-0
Results of PBT and vPvB assessment		

Result : Not persistent, bioaccumulative, and toxic (PBT)., Not very persistent and very bioaccumulative (vPvB).

Component:	methanol	CAS-No. 67-56-1
Results of PBT and vPvB assessment		

Result : Not persistent, bioaccumulative, and toxic (PBT)., Not very persistent and very bioaccumulative (vPvB).

12.6. Endocrine disrupting properties

Data for the product

Assessment Endocrine Disrupting Properties : 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.

Component:	formaldehyde	CAS-No. 50-00-0

Assessment Endocrine Disrupting Properties : 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.

Component:	methanol	CAS-No. 67-56-1

Assessment Endocrine Disrupting Properties	:	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

Data for the product
Additional ecological information

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Harmful effects to aquatic organisms due to pH-shift.

Component:	formaldehyde	CAS-No. 50-00-0
Additional ecological information		

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

Component:	methanol	CAS-No. 67-56-1
Additional ecological information		

Result	:	Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Danger to drinking water if even extremely small quantities leak into soil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	:	Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.
Contaminated packaging	:	Empty remaining contents. Packagings that cannot be cleaned are to be disposed of in the same manner as the product. Dispose of in accordance with local regulations.
European Waste Catalogue Number	:	No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

14.1. UN number or ID number

2209

14.2. UN proper shipping name

ADR : FORMALDEHYDE SOLUTION
RID : FORMALDEHYDE SOLUTION
IMDG : FORMALDEHYDE SOLUTION

14.3. Transport hazard class(es)

ADR-Class	: 8
(Labels; Classification Code; Hazard Identification Number; Tunnel restriction code)	8; C9; 80; (E)
RID-Class	: 8
(Labels; Classification Code; Hazard Identification Number)	8; C9; 80
IMDG-Class	: 8
(Labels; EmS)	8; F-A, S-B

14.4. Packaging group

ADR : III
RID : III
IMDG : III

14.5. Environmental hazards

Environmentally hazardous according to ADR	: no
Environmentally hazardous according to RID	: no
Marine Pollutant according to IMDG-Code	: no

14.6. Special precautions for user

Not applicable.

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

Data for the product

EU. Directive : Qualifying quantity for the application of Lower-tier

2012/18/EU on major accident hazards involving dangerous substances, Annex I, as amended		requirements: 50 tonnes; Part 1: Categories of dangerous substances; ACUTE TOXIC (Category 2, all exposure routes; Category 3, inhalation) Qualifying quantity for the application of Upper-tier requirements: 200 tonnes; Part 1: Categories of dangerous substances; ACUTE TOXIC (Category 2, all exposure routes; Category 3, inhalation)

Component:	**formaldehyde**	**CAS-No. 50-00-0**

EU. Chemicals Subject to Export Notification: Annex 1, Part 1, Regulation 649/2012/EU on export and import of dangerous chemicals, as amended	:	; The substance/mixture does not fall under this legislation.
EU. REACH, Annex XVII, Appendix 2, Entry 28 - Carcinogens: Category 1B (Table 3), Regulation 1907/2006/EC, as amended	:	, 28; Carcinogenicity; Category 1B
EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended		Point Nos.: 0,080, mg/m3, 77; Listed Point Nos.: 0,1, %, 75; Listed Point Nos.: 0,1, %, 28; Restricted to professional users.; Listed Point Nos.: 0, %, 72; Listed Point Nos.: 0,01, %, 75; Listed Point Nos.: 0,001, %, 75; Listed Point Nos.: 0,00005, %, 75; Listed Point Nos.: 0,00005, %, 75; Listed EC Number: , 200-001-8 Point Nos.: 0,062, mg/m3, 77; Listed Point Nos.: 0, %, 3; Listed
EU. REACH, Annex XVII, Appendix 12, Entry 72 - CMRs in Clothing & Textiles. Reg 1907/2006/EC, as amended		Concentration: 75, mg/kg, 200-001-8; Listed Index number: , 605-001-00-5

EU. Regulation No. 1223/2009 on cosmetic products, Annex II: List of Substances Prohibited in Cosmetic Products	:	Reference number: 1577; Listed
EU. Directive 2012/18/EU on major accident hazards involving dangerous substances, Annex I, as amended	:	Qualifying quantity for the application of Upper-tier requirements: 50 tonnes; Part 2: Named dangerous substances; List ID 14: Formaldehyde (concentration ≥ 90%), see note 7 Qualifying quantity for the application of Lower-tier requirements: 5 tonnes; Part 2: Named dangerous substances; List ID 14: Formaldehyde (concentration ≥ 90%), see note 7
EU. Substances, Mixtures, Related Processes: Annex I & Art. 2, Dir 2004/37/EC (CMRD), as amended	:	Hazard Designation: ; Carcinogen/Mutagen
Belgium. OELs. Exposure Limit Values to Chemical Substances at Work, Code of Well-being at work, Book VI, Title 1, as amended	:	Hazard Designation: ; Carcinogen/Mutagen Hazard Designation: ; When exposure exceeds the limit value irritation occurs or danger of acute poisoning exists. The work process must be designed in such a way that the exposure never exceeds the limit value. During measurements, the sampling period must be as short as possible to be able to perform a reliable measurement. The measurement result is then calculated depending on the sampling period.
Netherlands. List of Carcinogenic Substances and Processes, as amended	:	Hazard Designation: ; Carcinogenic

Component:	**methanol**	**CAS-No. 67-56-1**

EU. Chemicals Subject to Export Notification:	:	; The substance/mixture does not fall under this legislation.

Annex 1, Part 1, Regulation 649/2012/EU on export and import of dangerous chemicals, as amended		
EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended	:	Point Nos.: , 3; Listed
		Point Nos.: , 40; Listed Point Nos.: , 69; Listed Point Nos.: , 75; Listed
EU. Restricted Substances: Annex III, Regulation 1223/2009/EC on Cosmetic Products, as amended	:	Maximum concentration in ready for use preparation: 5 %; Denaturant for ethanol and isopropyl alcohol; See the text of the regulation for applicable exceptions or provisions.
EU. Directive 2012/18/EU on major accident hazards involving dangerous substances, Annex I, as amended	:	Qualifying quantity for the application of Lower-tier requirements: 500 tonnes; Part 2: Named dangerous substances; List ID 22: Methanol
		Qualifying quantity for the application of Upper-tier requirements: 5.000 tonnes; Part 2: Named dangerous substances; List ID 22: Methanol

15.2. Chemical safety assessment

The chemical safety assessment of substances from this mixture has been done.

SECTION 16: Other information

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

H225	Highly flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful 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.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H370	Causes damage to organs.

Full text of the Notes referred to under section 3.

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.
Note D	Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words "non-stabilised".
Note F	This substance may contain a stabiliser. If the stabiliser changes the hazardous properties of the substance, as indicated by the classification in Part 3, classification and labelling should be provided in accordance with the rules for classification and labelling of hazardous mixtures.

Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals

IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
UK REACH Auth. No.:	UK REACH Authorisation Number
UK REACH AuthAppC. No.	UK REACH Authorisation Application Consultation Number
UK REACH-Reg.No	UK REACH Registration Number
STOT	specific target organ toxicity
SPM	Synthetic Polymer Microparticles
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory
vPvB	very persistent and very bioaccumulative

Further information

Key literature references : Supplier information and data from the "Database of registered

and sources for data		substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for product classification	:	The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	:	The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information	:	Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use. The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.
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|| Indicates updated section.