

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

1.1. Product identifier

Trade name	: Formaldehyde 37/8 S
UFI	: 9GPP-EMAG-A82Y-XE6Q
EC Index-No.	: 605-001-00-5
EC-No.	: 200-001-8
CAS-No.	: 50-00-0
REACH registration No	: 01-2119488953-20
Product code	: 24510
Synonyms	: Formaldehyde solution with at least 25% formaldehyde

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

1.2.1. Relevant identified uses

Main use category	: Industrial use, Professional use
Use of the substance/mixture	: Raw material / Semi-manufactured / Polymerization.

Title	Use descriptors
Industrial use of solutions with a formaldehyde content up to 60%	SU0, SU8, PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, ERC1, ERC2, ERC3, ERC4, ERC5, ERC6a, ERC6b, ERC6c, ERC6d, ERC7
Industrial use of solutions with a formaldehyde content of up to 5%	PROC1, PROC2, PROC3, PROC4, PROC5, PROC6, PROC7, PROC8a, PROC8b, PROC9, PROC10, PROC13, PROC14, PROC15, PROC16, PROC21, PROC22, PROC23, PROC24, PROC25, ERC2, ERC3, ERC5, ERC6c, ERC6d
Industrial use of solutions with a formaldehyde content of up to 25%	SU0, SU8, PROC5, PROC8a, PROC8b, PROC9, PROC13, PROC15, ERC2, ERC3, ERC4, ERC5, ERC6c, ERC6d
Professional use of solutions with a formaldehyde content of up to 1.5%	PROC5, PROC8a, PROC8b, PROC10, PROC11, PROC13, PROC15, PROC16, PROC21, PROC23, PROC25, ERC8a, ERC8b, ERC8c, ERC8d, ERC8f
Professional use of solutions with a formaldehyde content of up to 5%	PROC8a, PROC11, PROC13, PROC15, ERC8a

Full text of use descriptors: see section 16

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Breustedt Chemie B.V.
Ijsseldijk 28
7325 WZ Apeldoorn
Nederland
T 055-5332844
productinfo@breustedt.nl - www.breustedt.nl

1.4. Emergency telephone number

Emergency number	: Noodnummer Breustedt Chemie B.V. -Alleen bij calamiteiten buiten kantoor uren- +31(0)653244323 For the sole purpose of informing physicians of accidental poisonings NL: +31(0)80 7558000 Nationaal Vergiftigingen Informatie Centrum (NVIC)
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Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 3	H301
Acute toxicity (dermal), Category 3	H311
Acute toxicity (inhal.), Category 2	H330
Skin corrosion/irritation, Category 1, Sub-Category 1B	H314
Serious eye damage/eye irritation, Category 1	H318
Skin sensitisation, Category 1	H317
Germ cell mutagenicity, Category 2	H341
Carcinogenicity, Category 1B	H350
Specific target organ toxicity – Single exposure, Category 2	H371
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Contains

: Formaldehyde and Methanol

Hazard statements (CLP)

: H301+H311 - Toxic if swallowed or in contact with skin.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H330 - Fatal if inhaled.
H335 - May cause respiratory irritation.
H341 - Suspected of causing genetic defects.
H350 - May cause cancer.
H371 - May cause damage to organs.

Precautionary statements (CLP)

: P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves / protective clothing / eye protection / face protection.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .
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 or a doctor.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Listed in Annex VI

: EC Index-No.: 605-001-00-5

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

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Component	
Formaldehyde (50-00-0)	PBT: not relevant – no registration required vPvB: not relevant – no registration required
Methanol (67-56-1)	vPvB: not relevant – no registration required

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Formaldehyde	CAS-No.: 50-00-0 EC-No.: 200-001-8 EC Index-No.: 605-001-00-5 REACH-no: 01-2119488953-20	25 – 50	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 2 (Inhalation), H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350 STOT SE 2, H371 STOT SE 3, H335
Methanol	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-2119433307-44	≤ 10	Flam. Liq. 2, H225 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 STOT SE 1, H370

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Formaldehyde	CAS-No.: 50-00-0 EC-No.: 200-001-8 EC Index-No.: 605-001-00-5 REACH-no: 01-2119488953-20	(0.2 ≤C < 100) Skin Sens. 1, H317 (5 ≤C < 25) Skin Irrit. 2, H315 (5 ≤C < 25) Eye Irrit. 2, H319 (5 ≤C < 100) STOT SE 3, H335 (25 ≤C < 100) Skin Corr. 1B, H314
Methanol	CAS-No.: 67-56-1 EC-No.: 200-659-6 EC Index-No.: 603-001-00-X REACH-no: 01-2119433307-44	(3 ≤C < 10) STOT SE 2, H371 (10 ≤C < 100) STOT SE 1, H370

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Immediately consult a doctor/medical service. Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary.
- First-aid measures after skin contact : Get immediate medical advice/attention. Wash skin with plenty of water. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

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First-aid measures after eye contact	: Get immediate medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Get immediate medical advice/attention. Rinse mouth out with water. Give nothing or a little water to drink. Never allow an unconscious person to drink or eat. Do NOT induce vomiting.

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

Symptoms/effects after inhalation	: Irritation of the respiratory tract. Risk of lung oedema. Corrosive to the respiratory tract. May cause shortness of breath, tightness of the chest, a sore throat and cough.
Symptoms/effects after skin contact	: May cause an allergic skin reaction. Causes severe burns. irritation (itching, redness, blistering).
Symptoms/effects after eye contact	: redness, itching, tears. Corrosion of the eye tissue. Causes serious eye damage.
Symptoms/effects after ingestion	: Burns to the gastric/intestinal mucosa. Abdominal pain, nausea.

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

Symptoms may be delayed in the event of gas inhalation. This often happens at night and should be classified as a serious asthmatic attack or as a lung edema. The person subject to exposure may have to go to the hospital for observation and treatment. Treatment: Gastric lavage. Administration of 100 ml of a solution with 2% ammonium carbonate and 20% urea. prophylaxis of pulmonary edema.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam. dry chemical powder, alcohol-resistant foam, carbon dioxide (CO ₂).
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire	: Carbon dioxide. Carbon monoxide.
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5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: 8.2. Exposure controls/personal protection.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid breathing dust/fume/gas/mist/vapours/spray. Obtain special instructions before use. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ensure adequate ventilation, especially in confined areas. correctly labelled. Comply with applicable regulations. Store locked up.
Storage conditions	: Store locked up. Store away from other materials. Keep only in original container. Keep container closed when not in use. Store in a dry place.
Storage temperature	: 15 – 25 °C
Heat and ignition sources	: Keep away from : Heat sources.
Storage area	: Store in a well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Formaldehyde 37/8 S (50-00-0)	
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	0.15
TGG-15min (OEL STEL)	0.5 mg/m ³
Formaldehyde (50-00-0)	
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	0.15
TGG-15min (OEL STEL)	0.5 mg/m ³
Methanol (67-56-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	260 mg/m ³ (Methanol; EU; Time-weighted average 8h; Indicative exposure limit for occupational exposure)
IOEL TWA [ppm]	200 ppm (Methanol; EU; Time-weighted average 8h; Indicative exposure limit for occupational exposure)
Belgium - Occupational Exposure Limits	
OEL TWA	266 mg/m ³ (Methanol; Belgium; Time-weighted average 8h)
OEL TWA [ppm]	200 ppm (Methanol; Belgium; Time-weighted average 8h)
OEL STEL	333 mg/m ³
OEL STEL [ppm]	250 ppm

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Methanol (67-56-1)	
France - Occupational Exposure Limits	
VME (OEL TWA) [ppm]	200 ppm (Methanol; France; Time-weighted average 8u; VRC: Valeur Réglementaire contraignant)
VLE (OEL C/STEL)	1300 mg/m ³ (Methanol; France; Short-term value; VL: Valeur non-regulatory indicative)
VLE (OEL C/STEL) [ppm]	1000 ppm (Methanol; France; Short-term value; VL: Valeur non-regulatory indicative)
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	133 mg/m ³ (Methanol; The Netherlands; Time-weighted average 8h; Legal)
TGG-8u (OEL TWA) [ppm]	100 ppm (Methanol; The Netherlands; Time-weighted average 8h; Legal)
Remark	H
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	266 mg/m ³ (Methanol; United Kingdom; Time Weighted Average 8h; Workplace Exposure Limit (EH40 / 2005))
WEL TWA (OEL TWA) [2]	200 ppm (Methanol; United Kingdom; Time Weighted Average 8h; Workplace Exposure Limit (EH40 / 2005))
WEL STEL (OEL STEL)	333 mg/m ³ (Methanol; United Kingdom; Short-term value; Workplace exposure limit (EH40 / 2005))
WEL STEL (OEL STEL) [ppm]	250 ppm (Methanol; United Kingdom; Short-term value; Workplace exposure limit (EH40 / 2005))
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	200 ppm (Methanol; USA; Time Weighted Average 8h; TLV - Adopted Value)
ACGIH OEL STEL [ppm]	250 ppm (Methanol; USA; Short-term value; TLV - Adopted Value)

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Formaldehyde 37/8 S (50-00-0)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	0.6 ppm
Long-term - systemic effects, dermal	240 mg/kg bodyweight/day
Long-term - local effects, dermal	0.037 µg/cm ²
Long-term - systemic effects, inhalation	9 mg/m ³
Long-term - local effects, inhalation	0.3 ppm
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	4.1 mg/kg bodyweight/day
Long-term - systemic effects, dermal	102 mg/kg bodyweight/day
Long-term - local effects, dermal	0.012 µg/cm ²
Long-term - local effects, inhalation	0.1 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	0.44 mg/l
PNEC aqua (marine water)	0.44 mg/l

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Formaldehyde 37/8 S (50-00-0)	
PNEC aqua (intermittent, freshwater)	4.44 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	2.3 mg/kg dwt
PNEC sediment (marine water)	2.3 mg/kg dwt
PNEC (Soil)	
PNEC soil	0.2 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0.19 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

Personal protective equipment:

Gas mask.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Combined eye and respiratory protection

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Skin and body protection	
Type	Standard
Long sleeved protective clothing, Use chemically protective clothing.	EN 14605
Safety shoes	

Hand protection:

protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves, Reusable gloves	Butyl rubber, PVC gloves, Nitrile rubber (NBR), Natural rubber	6 (> 480 minutes)			EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

Wear appropriate mask

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Respiratory protection			
Device	Filter type	Condition	Standard
Gas mask	Filter AX (brown)	Short term exposure	EN 14387
Self-contained breathing apparatus (SCBA)		Long term exposure	EN 133

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Colourless.
Odour	: Disagreeable. Pungent. strong.
Odour threshold	: 0.5 ppm
Melting point	: Not available
Freezing point	: Not available
Boiling point	: 95.9 °C
Flammability	: Non flammable.
Explosive limits	: Not available
Lower explosion limit	: 7 vol %
Upper explosion limit	: 73 vol %
Flash point	: 67 °C Closed crucible
Auto-ignition temperature	: 430 °C
Decomposition temperature	: Not available
pH	: 2.8 – 4
Viscosity, kinematic	: ≈ 2.018 mm ² /s
Viscosity, dynamic	: 2.2 mPa.s [20°C]
Solubility	: Water solubility.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 3.1 kPa (23.454 mm Hg) [20°C]
Vapour pressure at 50 °C	: Not available
Density	: ≈ 1.09 kg/l 20°C
Relative density	: Not available
Relative vapour density at 20 °C	: 1.04
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 45 %

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Polymerizes at temperatures below the recommended storage temperature. Polymer precipitation will occur upon cooling.

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10.3. Possibility of hazardous reactions

Reacts exothermically with: phenols, amines and ammonia.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. 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

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Toxic in contact with skin.
Acute toxicity (inhalation) : Fatal if inhaled.

Formaldehyde 37/8 S (50-00-0)

ATE CLP (oral)	100 mg/kg bodyweight
ATE CLP (dermal)	300 mg/kg bodyweight
ATE CLP (gases)	100 ppmv/4h
ATE CLP (vapours)	0.5 mg/l/4h
ATE CLP (dust,mist)	0.05 mg/l/4h

Formaldehyde (50-00-0)

LD50 oral rat	460 mg/kg
LC50 Inhalation - Rat	< 463
LC50 Inhalation - Rat (Vapours)	< 463 mg/l/4h

Methanol (67-56-1)

LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	15800 mg/kg
LC50 Inhalation - Rat	85 mg/l/4h
LC50 Inhalation - Rat [ppm]	64000 ppmv/4h
LC50 Inhalation - Rat (Vapours)	128.2 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns.
pH: 2.8 – 4

Formaldehyde (50-00-0)

pH	2.8 – 4
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Serious eye damage/irritation : Causes serious eye damage.
pH: 2.8 – 4

Formaldehyde (50-00-0)

pH	2.8 – 4
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Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Suspected of causing genetic defects.
Carcinogenicity : May cause cancer.

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Reproductive toxicity : Not classified
STOT-single exposure : May cause damage to organs. May cause respiratory irritation.

Formaldehyde (50-00-0)

STOT-single exposure : May cause damage to organs. May cause respiratory irritation.

Methanol (67-56-1)

STOT-single exposure : Causes damage to organs.

STOT-repeated exposure : Not classified

Formaldehyde (50-00-0)

LOAEL (oral, rat, 90 days) : 82 mg/kg bodyweight/day

Methanol (67-56-1)

NOAEL (oral, rat, 90 days) : 466 – 529 mg/kg bodyweight/day

NOAEC (inhalation, rat, vapour, 90 days) : 1.3 mg/l

Aspiration hazard : Not classified

Formaldehyde 37/8 S (50-00-0)

Viscosity, kinematic : $\approx 2.018 \text{ mm}^2/\text{s}$

Formaldehyde (50-00-0)

Viscosity, kinematic : $\approx 2.018 \text{ mm}^2/\text{s}$

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

Formaldehyde (50-00-0)

LC50 - Fish [1] : 6.7 mg/l

EC50 - Crustacea [1] : 5.8 ml/l

EC50 72h - Algae [1] : 4.89 mg/l

Methanol (67-56-1)

LC50 - Fish [1] : 15400 – 29400 mg/l

EC50 - Crustacea [1] : > 10000 mg/l

NOEC chronic fish : 7900 mg/l

12.2. Persistence and degradability

Formaldehyde (50-00-0)

Persistence and degradability : Not established.

Methanol (67-56-1)

Persistence and degradability : Not established.

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Methanol (67-56-1)

Biochemical oxygen demand (BOD)	0.6 – 1.12 g O ₂ /g substance
Chemical oxygen demand (COD)	1.42 g O ₂ /g substance
ThOD	1.5 g O ₂ /g substance
BOD (% of ThOD)	0.8 % ThOD

12.3. Bioaccumulative potential

Formaldehyde (50-00-0)

Partition coefficient n-octanol/water (Log Pow)	0.35
Bioaccumulative potential	Not established.

Methanol (67-56-1)

BCF - Fish [1]	< 10 mg/l
Bioaccumulative potential	Not established.

12.4. Mobility in soil

Formaldehyde (50-00-0)

Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4.9 – 15.9
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Methanol (67-56-1)

Surface tension	0.023 N/m 20°C
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to a certified waste disposal depot.
Ecology - waste materials	: Avoid release to the environment. Hazardous waste due to toxicity.
European List of Waste (LoW) code	: 07 07 99 - wastes not otherwise specified

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 2209	UN 2209	UN 2209	UN 2209	UN 2209

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ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
FORMALDEHYDE SOLUTION	FORMALDEHYDE SOLUTION	Formaldehyde solution	FORMALDEHYDE SOLUTION	FORMALDEHYDE SOLUTION
Transport document description				
UN 2209 FORMALDEHYDE SOLUTION, 8, III, (E)	UN 2209 FORMALDEHYDE SOLUTION, 8, III	UN 2209 Formaldehyde solution, 8, III	UN 2209 FORMALDEHYDE SOLUTION, 8, III	UN 2209 FORMALDEHYDE SOLUTION, 8, III
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: C9
Special provisions (ADR)	: 533
Limited quantities (ADR)	: 5I
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P001, IBC03, LP01, R001
Mixed packing provisions (ADR)	: MP19
Portable tank and bulk container instructions (ADR)	: T4
Portable tank and bulk container special provisions (ADR)	: TP1
Tank code (ADR)	: L4BN
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Hazard identification number (Kemler No.)	: 80
Orange plates	:



Tunnel restriction code (ADR)	: E
EAC code	: •2X

Transport by sea

Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4
Tank special provisions (IMDG)	: TP1
EmS-No. (Fire)	: F-A

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EmS-No. (Spillage) : S-B
Stowage category (IMDG) : A
Properties and observations (IMDG) : Colourless, clear liquid, with a suffocating pungent odour. Usually stabilized with methyl alcohol. Miscible with water. Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y841
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 852
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 856
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A803
ERG code (IATA) : 8i

Inland waterway transport

Classification code (ADN) : C9
Special provisions (ADN) : 533
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Equipment required (ADN) : PP, EP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : C9
Special provisions (RID) : 533
Limited quantities (RID) : 5L
Excepted quantities (RID) : E1
Packing instructions (RID) : P001, IBC03, LP01, R001
Mixed packing provisions (RID) : MP19
Portable tank and bulk container instructions (RID) : T4
Portable tank and bulk container special provisions (RID) : TP1
Tank codes for RID tanks (RID) : L4BN
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE8
Hazard identification number (RID) : 80

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
28.	Formaldehyde 37/8 S ; Formaldehyde	Substances which are classified as carcinogen category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 1 or Appendix 2, respectively.
3(a)	Methanol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F

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EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	Formaldehyde 37/8 S ; Formaldehyde ; Methanol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
40.	Methanol	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
69.	Methanol	Methanol
72.	Formaldehyde 37/8 S ; Formaldehyde	The substances listed in column 1 of the Table in Appendix 12

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 45 %

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

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15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 43	Diseases caused by formaldehyde and its polymers
RG 43 BIS	Cancerous conditions caused by formaldehyde
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG). Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK)	: WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).
Chemicals Prohibition Ordinance (ChemVerbotsV)	: This product is subject to ChemVerbotsV Annex 1 Entry 1. Paragraph 1) Coated and uncoated wood-based materials (chipboard, blockboard, veneer panels, and fibreboard) may not be placed on the market if the equalizing concentration of formaldehyde in the air in a test room exceeds 0.1 ml / cbm (ppm). Paragraph 2) Furniture that contains wood-based materials that do not meet the requirements of Paragraph 1 may not be placed on the market. Paragraph 1 is also deemed to have been fulfilled if the furniture complies with the equalization concentration specified in paragraph 1 during a whole-body test. Paragraph 3) Detergents, cleaning agents and care products with a mass content of more than 0.2% formaldehyde may not be placed on the market. This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category	: Z(2) - biodegradable substances with hazardous properties for humans and the environment (carcinogenicity/ mutagenicity/reprotoxicity/bioacumulative potential or toxicity)
SZW-lijst van kankerverwekkende stoffen	: Formaldehyde is listed
SZW-lijst van mutagene stoffen	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Borstvoeding	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid	: None of the components are listed
SZW-lijst van reprotoxische stoffen – Ontwikkeling	: Methanol is listed

Denmark

Class for fire hazard	: Class III-1
Store unit	: 50 liter
Classification remarks	: Flammable according to the Danish Ministry of Justice; Emergency management guidelines for the storage of flammable liquids must be followed
Danish National Regulations	: Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK)	: LK 6.1 - Toxic materials
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15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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For the following substances of this mixture a chemical safety assessment has been carried out:

Formaldehyde

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Additional information	Modified	12-07-2022: MSDS adapted to EU-format safety data sheet according to Regulation (EU) 2020/878
1.1	Additional information	Added	18-01-2021: UFI Code
1.4	Emergency number	Modified	06-09-2021: Emergency number NVIC

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

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Abbreviations and acronyms:

BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
IOELV	Indicative Occupational Exposure Limit Value
N.O.S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
TRGS	Technical Rules for Hazardous Substances
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
ED	Endocrine disrupting properties

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Carc. 1B	Carcinogenicity, Category 1B
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour.
H301	Toxic 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.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.

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Full text of H- and EUH-statements:	
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H370	Causes damage to organs.
H371	May cause damage to organs.
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 1	Specific target organ toxicity – single exposure, Category 1
STOT SE 2	Specific target organ toxicity – Single exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Full text of use descriptors	
ERC1	Manufacture of the substance
ERC2	Formulation into mixture
ERC3	Formulation into solid matrix
ERC4	Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC5	Use at industrial site leading to inclusion into/onto article
ERC6a	Use of intermediate
ERC6b	Use of reactive processing aid at industrial site (no inclusion into or onto article)
ERC6c	Use of monomer in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC6d	Use of reactive process regulators in polymerisation processes at industrial site (inclusion or not into/onto article)
ERC7	Use of functional fluid at industrial site
ERC8a	Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor)
ERC8b	Widespread use of reactive processing aid (no inclusion into or onto article, indoor)
ERC8c	Widespread use leading to inclusion into/onto article (indoor)
ERC8d	Widespread use of non-reactive processing aid (no inclusion into or onto article, outdoor)
ERC8f	Widespread use leading to inclusion into/onto article (outdoor)
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
PROC10	Roller application or brushing
PROC11	Non industrial spraying
PROC13	Treatment of articles by dipping and pouring
PROC14	Tabletting, compression, extrusion, pelettisation, granulation
PROC15	Use as laboratory reagent
PROC16	Use of fuels
PROC2	Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC21	Low energy manipulation and handling of substances bound in/on materials or articles
PROC22	Manufacturing and processing of minerals and/or metals at substantially elevated temperature

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Full text of use descriptors	
PROC23	Open processing and transfer operations at substantially elevated temperature
PROC24	High (mechanical) energy work-up of substances bound in /on materials and/or articles
PROC25	Other hot work operations with metals
PROC3	Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4	Chemical production where opportunity for exposure arises
PROC5	Mixing or blending in batch processes
PROC6	Calendering operations
PROC7	Industrial spraying
PROC8a	Transfer of substance or mixture (charging and discharging) at non-dedicated facilities
PROC8b	Transfer of substance or mixture (charging and discharging) at dedicated facilities
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing)
SU0	Other
SU8	Manufacture of bulk, large scale chemicals (including petroleum products)

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.