

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

1.1. Product identifier

Product form : Mixture
Product name : T-Wash Mordant Solution
Product code : VC5343

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

Relevant identified uses

Main use category : Industrial use, Professional use
Use of the substance/mixture : Cleaning/washing agents and additives

1.3. Details of the supplier of the safety data sheet

Supplier

Valet-Chem Ltd
Summit Close
NG17 8GJ Kirkby In Ashfield Nottingham, Nottinghamshire
United Kingdom
T T +44 (0) 844 414 0987
info@valetchem.co.uk

Supplier information

Leading Solvents Ireland Ltd
The Courtyard, Manor House
3 Church Road
Malahide, Co. Dublin
Ireland
T +353 1 845 7660

1.4. Emergency telephone number

Emergency number : +44 (0) 844 414 0987 (Office hours only)

Country/Area	Organisation	Emergency number
Ireland	National Poisons Information Centre. Beaumont Hospital. PO Box 1297. Beaumont Road 9 Dublin.	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)
United Kingdom	NHS 111/NHS 24/NHS Direct.	111 0845 4647 or call a doctor

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable liquids, Category 3 H226
Serious eye damage/eye irritation, Category 2 H319
Specific target organ toxicity – Single exposure, Category 3, H336
Narcosis
Hazardous to the aquatic environment – Chronic Hazard, H411
Category 2
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

See section 11 for toxicological information. See section 9/10 for physicochemical information. See section 12 for environmental information.

2.2. Label elements

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

Hazard pictograms (CLP) :



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	GHS02	GHS07	GHS09
Signal word (CLP)	: Warning		
Contains	: 1-methoxy-2-propanol; Propan-2-ol		
Hazard statements (CLP)	: H226 - Flammable liquid and vapour. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H411 - Toxic to aquatic life with long lasting effects.		
Precautionary statements (CLP)	: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P240 - Ground and bond container and receiving equipment. P241 - Use explosion-proof electrical/ventilating/lighting equipment. P261 - Avoid breathing mist, spray, vapours. P264 - Wash hands thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective clothing, eye protection, face protection, protective gloves. 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. P312 - Call a POISON CENTRE or doctor if you feel unwell. P337+P313 - If eye irritation persists: Get medical advice/attention. P370+P378 - In case of fire: Use water fog, dry extinguishing powder, alcohol resistant foam, carbon dioxide (CO ₂) to extinguish. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.		

2.3. Other hazards

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

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
1-methoxy-2-propanol substance with national workplace exposure limit(s) (GB, IE); substance with a Community workplace exposure limit	CAS-No.: 107-98-2 EC-No.: 203-539-1 EC Index-No.: 603-064-00-3 REACH-no: 01-2119457435- 35	$\geq 10 - < 20$	Flam. Liq. 3, H226 STOT SE 3, H336
Propan-2-ol substance with national workplace exposure limit(s) (DE, GB, NL)	CAS-No.: 67-63-0 EC-No.: 200-661-7 EC Index-No.: 603-117-00-0 REACH-no: 01-2119451558- 25	$\geq 10 - < 20$	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
Phosphoric Acid	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924- 24	$\geq 1 - < 5$	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Copper Carbonate	CAS-No.: 12069-69-1 EC-No.: 235-113-6 EC Index-No.: 029-020-00-8 REACH-no: 01-2119513711-50	≥ 1 – < 5	Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1.2 mg/l) Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Phosphoric Acid	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924-24	(10 ≤ C < 25) Skin Irrit. 2; H315 (10 ≤ C < 25) Eye Irrit. 2; H319 (25 ≤ C ≤ 100) Skin Corr. 1B; H314

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 general	: Take off all contaminated clothing immediately . Wash contaminated clothing before reuse.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance.
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting unless directed to do so by a physician. Call a physician immediately.

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

Symptoms/effects after inhalation	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Symptoms/effects after skin contact	: irritation (itching, redness, blistering). Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: redness, itching, tears. Causes eye irritation. stinging.
Symptoms/effects after ingestion	: May cause irritation to the digestive tract.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: high volume water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: The vapour may be invisible, heavier than air and spread along ground. Vapours may form explosive mixture with air. Flash back possible over considerable distance. Heating will cause a rise in pressure with a risk of bursting.
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Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Precautionary measures fire : Evacuate area.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : 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

General measures : Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Stop leak if safe to do so.

For non-emergency personnel

Protective equipment : Use personal protective equipment as required. Keep away unprotected persons. Do not breathe gas, fumes, vapour or spray.
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid contact with skin and eyes.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Do not flush into surface water or sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

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

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

Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe gas, fumes, vapour or spray.
Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment. Take precautionary measures against static discharge.
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Keep in an area equipped with solvent resistant flooring.

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Incompatible materials	: Store away from incompatible materials (see section 10).
Heat and ignition sources	: The vapour may be invisible, heavier than air and spread along ground. Can form explosive mixture with air.
Information on mixed storage	: Keep away from food, drink and animal feedingstuffs.
Storage area	: Store away from heat.
Packaging materials	: Keep only in the original container in a cool, well-ventilated place away from combustible materials.

Germany

Storage class (LGK, TRGS 510)

Joint storage table

: LGK 3 - Flammable liquids

LGK 1	LGK 2A	LGK 2B	LGK 3	LGK 4.1A
LGK 4.1B	LGK 4.2	LGK 4.3	LGK 5.1A	LGK 5.1B
LGK 5.1C	LGK 5.2	LGK 6.1A	LGK 6.1B	LGK 6.1C
LGK 6.1D	LGK 6.2	LGK 7	LGK 8A	LGK 8B
LGK 10	LGK 11	LGK 12	LGK 13	LGK 10-13

Joint storage not permitted for

: LGK 1, LGK 2A, LGK 4.1A, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1C, LGK 5.2, LGK 6.1B, LGK 6.2, LGK 7

Joint storage with restrictions permitted for

: LGK 5.1B, LGK 6.1D, LGK 11, LGK 10-13

Joint storage permitted for

: LGK 2B, LGK 3, LGK 6.1A, LGK 6.1C, LGK 8A, LGK 8B, LGK 10, LGK 12, LGK 13

Switzerland

Storage class (LK)

: LK 3 - Flammable liquids

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

1-methoxy-2-propanol (107-98-2)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	1-Methoxypropanol-2
IOEL TWA	375 mg/m ³
	100 ppm
IOEL STEL	568 mg/m ³
	150 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
OEL TWA	375 mg/m ³
	100 ppm
OEL STEL	568 mg/m ³
	150 ppm
United Kingdom - Occupational Exposure Limits	
Local name	1-Methoxypropan-2-ol
WEL TWA (OEL TWA)	375 mg/m ³
	100 ppm

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1-methoxy-2-propanol (107-98-2)	
WEL STEL (OEL STEL)	560 mg/m ³
	150 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Propan-2-ol (67-63-0)	
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA)	500 mg/m ³
AGW (OEL C)	1000 mg/m ³
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	650 mg/m ³
TGG-15min (OEL STEL)	0 mg/m ³
United Kingdom - Occupational Exposure Limits	
Local name	Propan-2-ol
WEL TWA (OEL TWA)	999 mg/m ³
	400 ppm
WEL STEL (OEL STEL)	1250 mg/m ³
	500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Provide sufficient air exchange and/or exhaust.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses, Safety goggles	Dust, Fine dust, Liquid, Droplet, spray	With side shields	EN 166

Skin protection

Skin and body protection:

Wear suitable protective clothing

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Hand protection:

Protective gloves. 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.

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Butyl rubber, Viton, Nitrile rubber, Neoprene	6 (> 480 minutes)	≥ 0.5		EN ISO 374

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
	Filter AX (brown)	Vapour protection, Protection for Liquid particles	EN 14387

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Blue.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: ≈ 32 °C Flash point estimated based on composition
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 1.5 – 2.5 The low pH is due to the acidic nature of the formulation and does not in itself indicate corrosivity under normal conditions of use.
Viscosity, kinematic	: Not available
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: ≈ 1.028
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapour.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5. Incompatible materials

Combustible materials. Oxidizing agent. Strong acids. Strong bases.

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) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

1-methoxy-2-propanol (107-98-2)	
LD50 oral rat	4016 mg/kg (Rat, male and female) (Directive 67/548/EEC, Annex V, B.1.) Ingestion may cause central nervous system depression.
LD50 dermal rat	> 2000 mg/kg
LC50 Inhalation - Rat	25.8 mg/l (Rat; 6 h)
Phosphoric Acid (7664-38-2)	
LD50 oral rat	1518 mg/kg
Copper Carbonate (12069-69-1)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
Propan-2-ol (67-63-0)	
LD50 oral	5840 mg/kg
LD50 dermal	13900 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	25000 mg/l/4h

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Skin corrosion/irritation : The product exhibits a low pH due to its acidic nature. This value alone does not indicate corrosivity under normal conditions of use. Classification has been determined in accordance with CLP criteria, taking into account available test data and/or bridging principles.
: The product exhibits a low pH due to its acidic nature. This value alone does not indicate corrosivity under normal conditions of use. Classification has been determined in accordance with CLP criteria, taking into account available test data and/or bridging principles.
pH: 1.5 – 2.5 The low pH is due to the acidic nature of the formulation and does not in itself indicate corrosivity under normal conditions of use.

1-methoxy-2-propanol (107-98-2)

pH	5.5
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Propan-2-ol (67-63-0)

pH	5.5
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Serious eye damage/irritation : Causes serious eye irritation.
pH: 1.5 – 2.5 The low pH is due to the acidic nature of the formulation and does not in itself indicate corrosivity under normal conditions of use.

1-methoxy-2-propanol (107-98-2)

pH	5.5
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Propan-2-ol (67-63-0)

pH	5.5
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Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause drowsiness or dizziness.

1-methoxy-2-propanol (107-98-2)

STOT-single exposure	May cause drowsiness or dizziness.
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Propan-2-ol (67-63-0)

STOT-single exposure	May cause drowsiness or dizziness.
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STOT-repeated exposure : Not classified

1-methoxy-2-propanol (107-98-2)

LOAEL (oral, rat, 90 days)	2757 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
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NOAEL (oral, rat, 90 days)	919 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
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NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
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Aspiration hazard : Not classified

1-methoxy-2-propanol (107-98-2)

Viscosity, kinematic	1.848 mm ² /s
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Propan-2-ol (67-63-0)

Viscosity, kinematic	3.115 mm ² /s
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11.2. Information on other hazards

No additional information available

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.

1-methoxy-2-propanol (107-98-2)	
LC50 - Fish [1]	6812 mg/l (Leuciscus idus (Golden orfe); 96 h) (static test; DIN 38412)
LC50 - Fish [2]	20800 mg/l (Pimephales promelas (fathead minnow); 96 h) (static test; ASTM)
LC50 - Other aquatic organisms [1]	> 1000 mg/l (Oncorhynchus mykiss (rainbow trout); 96 h) (semi-static test; OECD Test Guideline 203)
EC50 - Other aquatic organisms [1]	2954 mg/l Test organisms (species): other aquatic crustacea:
ErC50 algae	> 1000 mg/l (Pseudokirchneriella subcapitata (microalgae); 7 d) (static test; End point: Growth rate)

Propan-2-ol (67-63-0)	
LC50 - Fish [1]	9640 mg/l
LC50 - Fish [2]	9640 mg/l Test organisms (species): Pimephales promelas
EC50 - Other aquatic organisms [1]	13299 mg/l waterflea
EC50 - Other aquatic organisms [2]	> 1000 mg/l

12.2. Persistence and degradability

T-Wash Mordant Solution	
Persistence and degradability	Not rapidly degradable
1-methoxy-2-propanol (107-98-2)	
Persistence and degradability	Not rapidly degradable
Biodegradation	96 % (Related to: Dissolved organic carbon (DOC); Exposure Time: 28 d)(OECD Test Guideline 301E). Readily biodegradable.. The 10 day time window criterion is fulfilled.
Phosphoric Acid (7664-38-2)	
Persistence and degradability	Not rapidly degradable
Copper Carbonate (12069-69-1)	
Persistence and degradability	Not rapidly degradable
Propan-2-ol (67-63-0)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

1-methoxy-2-propanol (107-98-2)	
Partition coefficient n-octanol/water (Log Pow)	0.37 The product has low potential bioaccumulation.
Propan-2-ol (67-63-0)	
Partition coefficient n-octanol/water (Log Pow)	0.05

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12.4. Mobility in soil

1-methoxy-2-propanol (107-98-2)

Mobility in soil	70.7 mN/m (1.0 g/l; 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.1 – 1

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

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions. Disposal together with normal waste is not allowed.
Product/Packaging disposal recommendations	: Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
Additional information	: Flammable vapours may accumulate in the container.
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

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 1993	UN 1993	UN 1993	UN 1993	UN 1993
14.2. UN proper shipping name				
FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol)	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol)	Flammable liquid, n.o.s. (Propan-2-ol ; 1-methoxy-2-propanol)	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol)	FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol)

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ADR	IMDG	IATA	ADN	RID
Transport document description				
UN 1993 FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol), 3, III, (D/E), ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol), 3, III, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 1993 Flammable liquid, n.o.s. (Propan-2-ol ; 1-methoxy-2-propanol), 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol), 3, III, ENVIRONMENTALLY HAZARDOUS	UN 1993 FLAMMABLE LIQUID, N.O.S. (Propan-2-ol ; 1-methoxy-2-propanol), 3, III, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
3	3	3	3	3
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment: Yes	Dangerous for the environment: Yes Marine pollutant: Yes EmS-No. (Fire): F-E EmS-No. (Spillage): S-E	Dangerous for the environment: Yes	Dangerous for the environment: Yes	Dangerous for the environment: Yes
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: F1
Special provisions (ADR)	: 274, 601
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, TP29
Tank code (ADR)	: LGBF
Vehicle for tank carriage	: FL
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V12
Special provisions for carriage - Operation (ADR)	: S2
Hazard identification number (Kemler No.)	: 30
Orange plates	:  
Tunnel restriction code (ADR)	: D/E
EAC code	: •3Y

Transport by sea

Special provisions (IMDG)	: 223, 274, 955
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP01, P001
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T4

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Tank special provisions (IMDG) : TP1, TP29
Stowage category (IMDG) : A

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y344
PCA limited quantity max net quantity (IATA) : 10L
PCA packing instructions (IATA) : 355
PCA max net quantity (IATA) : 60L
CAO packing instructions (IATA) : 366
CAO max net quantity (IATA) : 220L
Special provisions (IATA) : A3
ERG code (IATA) : 3L

Inland waterway transport

Classification code (ADN) : F1
Special provisions (ADN) : 274, 601
Limited quantities (ADN) : 5 L
Excepted quantities (ADN) : E1
Carriage permitted (ADN) : T
Equipment required (ADN) : PP, EX, A
Ventilation (ADN) : VE01
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : F1
Special provisions (RID) : 274, 601
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, TP29
Tank codes for RID tanks (RID) : LGBF
Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W12
Colis express (express parcels) (RID) : CE4
Hazard identification number (RID) : 30

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

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Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Austria

Ordinance on Flammable Liquids (VbF)

: Hazard category 3: Flammable (flash point 23 - 60 °C. Excluding gas oils and petroleum).

Toxic Substances Ordinance 2000

: Is not subject to the Toxic Substances Ordinance 2000.

Denmark

Classification remarks

: 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 it.

If an employee is pregnant or breastfeeding and the person in question uses or is exposed to this product at work, the employer must always carry out a risk assessment of the work.

The assessment must both deal with the dangerousness of the impact and its strength and duration. The employer's decision that a pregnant or lactating woman can perform a specific work task must therefore be made in the context of her specific working conditions. See also

WEA-Guideline A.1.8-7 on the working environment of pregnant and breastfeeding workers. Listed or contains substance(s) on the Denmark - Indicative list of organic solvents present

in Annex 3.4.1 of the WEA Guidance C.0.1-1: 1-Methoxy-2-propanol (1994) (107-98-2), Isopropyl alcohol (2005) (67-63-0)

France

Occupational diseases	
Code	Description
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).

Major Accidents Ordinance (12. BImSchV)

: Is listed in the Major Accidents Ordinance (12. BImSchV)

Major Accidents Ordinance (12. BImSchV)				
Number	Code	Title	Lower-tier	Upper-tier
1.2.5.1	P5a	Flammable liquids. Flammable liquids of category 1; flammable liquids of category 2 or 3 maintained at a temperature above their boiling point; other liquids with a flash point of ≤ 60 °C maintained at a temperature above their boiling point	10,000 kg	50,000 kg

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Major Accidents Ordinance (12. BImSchV)				
Number	Code	Title	Lower-tier	Upper-tier
1.2.5.2	P5b	Flammable liquids. Flammable liquids of category 2 or 3, where special processing conditions such as high pressure or high temperature can lead to the risk of accidents; other liquids with a flash point of ≤ 60 °C, where special processing conditions such as high pressure or high temperature can lead to the risk of accidents	50,000 kg	200,000 kg
1.2.5.3	P5c	Flammable liquids of categories 2 or 3, not covered under P5a and P5b	5,000,000 kg	50,000,000 kg
1.3.2	E2	Hazardous to the aquatic environment, Chronic 2	200,000 kg	500,000 kg

Netherlands

- ABM category : A(2) - toxic for aquatic organisms, may have longterm hazardous effects in aquatic environment
- SZW-lijst van kankerverwekkende stoffen : None of the components are 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 : None of the components are listed

Poland

- Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended)

Spain

- Royal Decree 665/1997 : Is not subject to the Royal Decree 665/1997

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

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
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
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
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstracts Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

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Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

The classification complies with : ATP 12

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.