

SAFETY DATA SHEET

Safety data sheet for Brantho-Korrux 3 in 1 ALL-IN-ONE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: Safety data sheet for Brantho-Korrux 3 in 1 ALL-IN-ONE

Other names / Synonyms: Applies to all colours offered ex works

Unique formula identifier (UFI): Brantho-Korrux "3 in 1": 2KF8-5F8X-QAQ2-8V8X

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

Relevant identified uses of the substance or mixture: Paint

Uses advised against : None known.

1.3. Details of the supplier of the safety data sheet

Company and address: **RODARO GmbH**

Erlistrasse 3
 CH-6403 Küsnacht am Rigi
 Switzerland
 T: +41 41 390 14 53
 E: info@rodaro.ch
 www.rodaro.ch

RODARO Germany GmbH

Marie-Curie-Strasse 2
 DE-79618 Rheinfelden
 Sitz: Talstr. 17, D-74223 Flein
 Germany
 T: +49 7623 7479025
 E: info@rodaro.com
 www.rodaro.com

Revision: 18.10.2024

SDS Version: 1.1

Date of the last version 23.09.2024 (1.0)

1.4. Emergency telephone number

Switzerland:

Toxicological Information Centre
 FROM ABROAD: +41 44 251 51 51
 IN SWITZERLAND: 145

Germany:

Nat. Emergency Call: 112
 Poison Control Center Berlin: +49 30 192 40
 Poison Control Center München: +49 89 192

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Aerosol 1; H222, H229, Extremely flammable aerosol. Pressurised container: May burst if heated.

2.2. Label elements

Hazard pictogram(s):



<i>Signal word:</i>	Danger
<i>Hazard statement(s):</i>	Extremely flammable aerosol. Pressurised container: May burst if heated. (H222, H229)
<i>Precautionary statement(s):</i>	
<i>General:</i>	Keep out of reach of children. (P102)
<i>Prevention:</i>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210) Do not spray on an open flame or other ignition source. (P211) Do not pierce or burn, even after use. (P251) Use only outdoors or in a well-ventilated area. (P271)
<i>Response:</i>	-
<i>Storage:</i>	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. (P410+P412)
<i>Disposal:</i>	-
<i>Hazardous substances:</i>	dimethyl ether
<i>Additional labelling:</i>	EUH066, Repeated exposure may cause skin dryness or cracking. EUH211, Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
<i>VOC:</i>	VOC content as supplied: Brantho-Korrux "3 in 1": < 450 g/L

2.3. Other hazards

<i>Additional warnings:</i>	In the event of leaks, high concentrations of gases can quickly form. They can be toxic, asphyxiating, or explosive. This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.
-----------------------------	--

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable. This product is a mixture.

3.2. Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
dimethyl ether	CAS No.: 115-10-6 EC No.: 204-065-8 REACH: 01-2119472128-37-XXXX Index No.: 603-019-00-8	25-40%	Flam. Gas 1A, H220 Press. Gas (Liq.) , H280	[1]

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Dearomatised Hydrocarbons, C9-C11, <2% aromatics, < 0.1 % benzene	CAS No.: 64742-48-9 EC No.: 919-857-5 REACH: 01-2119463258-33-XXXX Index No.:	5-10%	EUH066 Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336	[15], [19]
1-methoxy-2-propanol	CAS No.: 107-98-2 EC No.: 203-539-1 REACH: 01-2119457435-35-XXXX Index No.: 603-064-00-3	5-10%	Flam. Liq. 3, H226 STOT SE 3, H336	[1]
2-methoxy-1-methylethyl acetate	CAS No.: 108-65-6 EC No.: 203-603-9 REACH: 01-2119475791-29-XXXX Index No.: 607-195-00-7	1-3%	Flam. Liq. 3, H226 STOT SE 3, H336	[1]
Aluminium dihydrogen triphosphate	CAS No.: 13939-25-8 EC No.: 237-714-9 REACH: 01-2119970565-28-XXXX Index No.:	1-3%	Eye Irrit. 2, H319	
Methyl lactate	CAS No.: 547-64-8 EC No.: 208-930-0 REACH: Index No.: 607-092-00-7	<1%	Flam. Liq. 3, H226 Eye Irrit. 2, H319 STOT SE 3, H335	
Dearomatised hydrocarbons, C9-C11, < 2% aromatics, < 0.1 % benzene	CAS No.: 1174522-20-3 EC No.: 807-936-6 REACH: 01-2119463258-33-XXXX Index No.:	<1%	EUH066 Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336	
n-butyl acetate	CAS No.: 123-86-4 EC No.: 204-658-1 REACH: 01-2119485493-29-XXXX Index No.: 607-025-00-1	<1%	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336	

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

[1] European occupational exposure limit.

[15] The classification as a carcinogen / mutagen will not be taken into account as the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7) (CLP, Annex VI, note P).

[19] UVCB = Unknown or variable composition, complex reaction products or of biological materials

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

<i>General information:</i>	In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.
<i>Inhalation:</i>	Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.
<i>Skin contact:</i>	IF ON SKIN: Wash with plenty of water and soap. Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners. If skin irritation occurs: Get medical advice/attention.
<i>Eye contact:</i>	If in eyes: Flush eyes with water or saline water (20-30 °C) for at least 5 minutes. Remove contact lenses. Seek medical assistance and continue flushing during transport.
<i>Ingestion:</i>	If the person is conscious, rinse the mouth with water and stay with the person. Never give the person anything to drink. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the person lean forward with head down to avoid inhalation of or choking on vomited material.
<i>Burns:</i>	Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

Treat symptomatically.

Information to medics

Bring this safety data sheet or the label from this product.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.
 Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

5.2. Special hazards arising from the substance or mixture

Extremely flammable aerosol. Pressurised container. In a fire or if heated, a pressure increase will occur and the container may burst.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Sulphur oxides

Carbon oxides (CO / CO₂)

Some metal oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Accidental releases always pose a serious risk of fire or explosion.

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Ensure adequate ventilation, especially in confined areas.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc.

Keep unauthorized persons away from the spill

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Do not spray on an open flame or other ignition source.

Do not pierce or burn, even after use.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Pressurized gas packs (spray cans, aerosol cans) must be stored behind a wire mesh, which allows gases to escape and holds back packs flying around.

Joint storage is permitted for products in storage classes: 2B, 3, 6.1A, 6.1B, 6.1C, 6.1D, 8A, 8B, 10,

11, 12, 13

Restrictions apply to joint storage of products in storage class: 5.1C

Joint storage is NOT allowed for products in all other storage classes.

Recommended storage material: Always store in containers of the same material as the original container.

Storage class: Storage class 2 B (Aerosol packages).
 TRGS 510 - Storage of hazardous substances in non-stationary containers.

Storage conditions: No specific requirements

Incompatible materials: Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

7.3. Specific end use(s)

GISCODE: BS 40 (M-GP02, M-LL01)

This product should only be used for applications quoted in section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

dimethyl ether

Long term exposure limit (8 hours) (ppm): 1000

Long term exposure limit (8 hours) (mg/m³): 1900

Short term exposure limit (15 minutes) (ppm): 8000

Short term exposure limit (15 minutes) (mg/m³): 15200

Category for short-term values: II

Annotations:

DFG = Senate Commission for the examination of Harmful working materials of the DFG (MAK Commission)

EU = European Union (The EU has set an exposure limit: Deviations in value and peak limit are possible.)

1-methoxy-2-propanol

Long term exposure limit (8 hours) (ppm): 100

Long term exposure limit (8 hours) (mg/m³): 370

Short term exposure limit (15 minutes) (ppm): 200

Short term exposure limit (15 minutes) (mg/m³): 740

Category for short-term values: I

Annotations:

DFG = Senate Commission for the examination of Harmful working materials of the DFG (MAK Commission)

Y = No risk of fetal damage is to be feared if the occupational exposure limit (OEL) value and the biological limit value (BLV) are adhered to.

EU = European Union (The EU has set an exposure limit: Deviations in value and peak limit are possible.)

2-methoxy-1-methylethyl acetate

Long term exposure limit (8 hours) (ppm): 50

Long term exposure limit (8 hours) (mg/m³): 270

Short term exposure limit (15 minutes) (ppm): 50

Short term exposure limit (15 minutes) (mg/m³): 270

Category for short-term values: I

Annotations:

DFG = Senate Commission for the examination of Harmful working materials of the DFG (MAK Commission)

Y = No risk of fetal damage is to be feared if the occupational exposure limit (OEL) value and the biological limit value (BLV) are adhered to.

EU = European Union (The EU has set an exposure limit: Deviations in value and peak limit are possible.)

2-ethoxy-1-methylethyl acetate

Long term exposure limit (8 hours) (ppm): 20

Long term exposure limit (8 hours) (mg/m³): 120

Short term exposure limit (15 minutes) (ppm): 40

Short term exposure limit (15 minutes) (mg/m³): 240

Category for short-term values: II

Annotations:

H = Risk of dermal absorption

DFG = Senate Commission for the examination of Harmful working materials of the DFG (MAK Commission)

Y = No risk of fetal damage is to be feared if the occupational exposure limit (OEL) value and the biological limit value (BLV) are adhered to.

(14) = Occupational Exposure Limit for the sum of the air concentrations of 1-ethoxypropan-2-ol and 2-ethoxy-1-methylethyl acetate.

Technical requirements for hazardous substances, workplace exposure limits, TRGS 900 (Jan. 2006)

DNEL

1-methoxy-2-propanol

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	78 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	183 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	43.9 mg/m ³
Long term – Systemic effects - Workers	Inhalation	369 mg/m ³
Short term – Local effects - Workers	Inhalation	553.5 mg/m ³
Short term – Systemic effects - Workers	Inhalation	553.5 mg/m ³
Long term – Systemic effects - General population	Oral	33 mg/kg bw/day

2-ethoxy-1-methylethyl acetate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	62 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	103 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	181 mg/m ³
Long term – Systemic effects - Workers	Inhalation	152 mg/m ³
Short term – Systemic effects - General population	Inhalation	1420 mg/m ³
Short term – Systemic effects - Workers	Inhalation	2366 mg/m ³
Long term – Systemic effects - General population	Oral	13.1 mg/kg

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

		bw/day
--	--	--------

Aluminium dihydrogen triphosphate

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	16.45 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	32.9 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	2.47 mg/m ³
Long term – Systemic effects - Workers	Inhalation	11.52 mg/m ³
Long term – Systemic effects - General population	Oral	1.65 mg/kg bw/day

Dearomatised Hydrocarbons, C9-C11, <2% aromatics, < 0.1 % benzene

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	178.57 mg/m ³
Long term – Local effects - Workers	Inhalation	837.5 mg/m ³
Long term – Systemic effects - General population	Inhalation	410 µg/m ³
Long term – Systemic effects - Workers	Inhalation	1.9 mg/m ³
Short term – Local effects - General population	Inhalation	640 mg/m ³
Short term – Local effects - Workers	Inhalation	1066.67 mg/m ³
Short term – Systemic effects - General population	Inhalation	1152 mg/m ³
Short term – Systemic effects - Workers	Inhalation	1286.4 mg/m ³

dimethyl ether

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Inhalation	471 mg/m ³
Long term – Systemic effects - Workers	Inhalation	1894 mg/m ³

PNEC

1-methoxy-2-propanol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		10 mg/L
Freshwater sediment		52.3 mg/kg
Intermittent release (freshwater)		100 mg/L
Marine water		1 mg/L
Marine water sediment		5.2 mg/kg
Sewage treatment plant		100 mg/L
Soil		4.59 mg/kg

2-ethoxy-1-methylethyl acetate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		2 mg/L
Freshwater sediment		8.2 mg/kg
Intermittent release (freshwater)		2 mg/L

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Marine water		200 µg/L
Marine water sediment		820 µg/kg
Predators		117 mg/kg
Sewage treatment plant		62.5 mg/L
Soil		670 µg/kg

Aluminium dihydrogen triphosphate

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		30 µg/L
Marine water		3 µg/L

dimethyl ether

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		155 µg/L
Freshwater sediment		681 µg/kg
Intermittent release (freshwater)		1.549 mg/L
Marine water		16 µg/L
Marine water sediment		69 µg/kg
Sewage treatment plant		160 mg/L
Soil		45 µg/kg

8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations:

Smoking, drinking and consumption of food is not allowed in the work area.

Exposure scenarios:

There are no exposure scenarios implemented for this product.

Exposure limits:

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures:

Vapour formation must be reduced to a minimum and be below the current limit values (see above).

If the regular air flow in the work area is not sufficient, the installation of a local supply and/or exhaust air system is recommended. Emergency and eye showers must be clearly labelled.

The usual precautionary measures apply when using the product. Avoid inhalation of vapours.

Hygiene measures:

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

Measures to avoid environmental exposure:

No specific requirements.

Individual protection measures, such as personal protective equipment

Generally: Use only CE marked protective equipment.

Respiratory Equipment:

Work situation	Type	Class	Colour	Standards	
	Respiratory protection is not needed in the event of adequate ventilation.				
In the event of prolonged exposure or high concentrations	Combination filter A2B2E2K2-P3		Brown/Gray/Yellow/Green/White	EN14387	

Skin protection:

Work situation	Recommended	Type/Category	Standards	
When there is risk of splash- / intermittent exposure	Dedicated work clothing should be worn.	-	-	

Hand protection:

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
When there is risk of splash- / intermittent exposure	Nitrile	0.4	> 480	EN374-2, EN374-3, EN388	

Eye protection:

Work situation	Type	Standards	
When there is risk of splash- / intermittent exposure	Safety glasses with side shields.	EN166	

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

<i>Physical state:</i>	Aerosol
<i>Colour:</i>	See product description
<i>Odour / Odour threshold:</i>	Aromatic
<i>pH:</i>	No relevant or available data due to the nature of the product.
<i>Density (g/cm³):</i>	1,1-1,5 (20 °C)
<i>Kinematic viscosity:</i>	> 20.5 mm²/s
<i>Particle characteristics:</i>	No relevant or available data due to the nature of the product.

Phase changes

<i>Melting point/Freezing point (°C):</i>	No relevant or available data due to the nature of the product.
<i>Softening point/range (°C):</i>	Does not apply to aerosols.
<i>Boiling point (°C):</i>	No relevant or available data due to the nature of the product.
<i>Vapour pressure:</i>	5-15 hPa
<i>Relative vapour density:</i>	No relevant or available data due to the nature of the product.
<i>Decomposition temperature (°C):</i>	No relevant or available data due to the nature of the product.

Data on fire and explosion hazards

<i>Flash point (°C):</i>	24-26
<i>Flammability (°C):</i>	The material is ignitable.
<i>Auto-ignition temperature (°C):</i>	>240
<i>Lower and upper explosion limit (% v/v):</i>	0.5 - 11

Solubility

<i>Solubility in water:</i>	ca. 10 %
<i>n-octanol/water coefficient (LogKow):</i>	No relevant or available data due to the nature of the product.
<i>Solubility in fat (g/L):</i>	No relevant or available data due to the nature of the product.

9.2. Other information

Solvent separation test ADR/RID < 1 %

Solids content in the paint component (wt. %):
Brantho-Korrux "3 in 1": 70

Solvent content in the paint component (wt. %):
Brantho-Korrux "3 in 1": 30

Other physical and chemical parameters: No data available.

Oxidizing properties: No relevant or available data due to the nature of the product.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid static electricity.

Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

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

Product/substance	1-methoxy-2-propanol
Test method:	OECD 401
Species:	Rat, Fischer 344, male/female
Route of exposure:	Oral
Test:	LD50
Result:	3739 mg/kg bw

Product/substance	1-methoxy-2-propanol
Test method:	OECD 403
Species:	Rat, Fischer 344, male/female
Route of exposure:	Inhalation
Test:	LD50
Result:	> 7000 ppm

Product/substance	1-methoxy-2-propanol
Test method:	OECD 402
Species:	Rat, Fischer 344, male/female
Route of exposure:	Dermal
Test:	LD50
Result:	> 2000 mg/kg bw

Skin corrosion/irritation

Product/substance	1-methoxy-2-propanol
Test method:	OECD 404
Species:	Rabbit, New Zealand White, male/female
Duration:	4 hours
Result:	No adverse effect observed (Not irritating)

Serious eye damage/irritation

Product/substance	1-methoxy-2-propanol
Test method:	OECD 405
Species:	Rabbit, New Zealand White, male/female
Duration:	72 hours

Result: No adverse effect observed (Not irritating)

Product/substance Aluminium dihydrogen triphosphate
 Test method: OECD 405
 Species: Rabbit, New Zealand White, male/female
 Result: Adverse effect observed (Irritating)

Respiratory sensitisation

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

Skin sensitisation

Product/substance 1-methoxy-2-propanol
 Test method: OECD 406
 Species: Guinea pig, male/female
 Result: No adverse effect observed (not sensitising)

Germ cell mutagenicity

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

Carcinogenicity

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

Reproductive toxicity

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

STOT-single exposure

Product/substance 1-methoxy-2-propanol
 Species: Human
 Route of exposure: Inhalation
 Target organ: Central nervous system
 Conclusion: Adverse effect observed

Product/substance 2-methoxy-1-methylethyl acetate
 Species: Human
 Route of exposure: Inhalation
 Target organ: Central nervous system
 Conclusion: Adverse effect observed

Product/substance 2-ethoxy-1-methylethyl acetate
 Species: Human, male/female
 Route of exposure: Inhalation
 Target organ: Central nervous system
 Conclusion: Adverse effect observed

STOT-repeated exposure

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

Aspiration hazard

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

11.2. Information on other hazards

Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

Other information

None known.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product/substance	1-methoxy-2-propanol
Test method:	DIN 38412
Species:	Fish, <i>Leuciscus idus</i> , male/female
Compartment:	Freshwater
Duration:	96 hours
Test:	LC50
Result:	6812 mg/L

Product/substance	1-methoxy-2-propanol
Species:	<i>Daphnia</i> , <i>Daphnia magna</i> , male/female
Compartment:	Freshwater
Duration:	48 hours
Test:	LC50
Result:	23300

Product/substance	1-methoxy-2-propanol
Species:	Algae, <i>Pseudokirchneriella subcapitata</i> , male/female
Compartment:	Freshwater
Duration:	7 days
Test:	EC50
Result:	> 1000 mg/L

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

12.7. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Completely dried paint residues (also on brushes, rollers, filter mats, etc.) are not hazardous

waste for any of the products listed here.

The liquid product should be treated as hazardous waste. (*)

HP 3 - flammable

Dispose of contents/container to authorised waste disposal company or municipal collection point.

Commission REGULATION (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code:

08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances
08 01 12	Waste paint and varnish other than those mentioned in 08 01 11

Contaminated packing

Emptied cans, including those with dried paint residues adhering to them, are high-grade scrap (yellow bin if applicable).

Dried paint residues, including those on working or covering materials, are household waste or commercial waste similar to household waste.

If the cans contain not fully dry paint or hardener, the following waste code number applies:

EWC code:

15 01 10*	Packaging containing residues of or contaminated by dangerous substances
-----------	--

SECTION 14: TRANSPORT INFORMATION

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
ADR	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F	-	No	Limited quantities: 1 L Tunnel restriction code: (D) See below for additional information.
IMDG	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F	-	No	Limited quantities: 1 L EmS: F-D S-U See below for additional information.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

	14.1 UN / ID	14.2 UN proper shipping name	14.3 Hazard class(es)	14.4 PG*	14.5 Env**	Other informat ion:
						on.
IATA	UN1950	AEROSOLS	Transport hazard class: 2 Label: 2.1 Classification code: 5F	-	No	See below for additiona l informati on.

* Packing group

** Environmental hazards

Additional information

This product is within scope of the regulations of transport of dangerous goods.
ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.
IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.
IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

14.6. Special precautions for user
Not applicable.

14.7. Maritime transport in bulk according to IMO instruments
No data available.

SECTION 15: REGULATORY INFORMATION

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

Restrictions for application:

People under the age of 18 shall not be exposed to this product.
Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education:

No specific requirements.

SEVESO - Categories / dangerous substances:

P3a - FLAMMABLE AEROSOLS, Qualifying quantity (lower-tier): 150 tonnes (net) / (upper-tier): 500 tonnes (net)

REACH, Annex XVII:

dimethyl ether is subject to REACH restrictions (entry 40).
Dearomatised Hydrocarbons, C9-C11, <2% aromatics, < 0.1 % benzene is subject to REACH restrictions (entry 40).
1-methoxy-2-propanol is subject to REACH restrictions (entry 40).
2-methoxy-1-methylethyl acetate is subject to REACH restrictions (entry 40).

	2-ethoxy-1-methylethyl acetate is subject to REACH restrictions (entry 40). Methyl lactate is subject to REACH restrictions (entry 40). Dearomatised hydrocarbons, C9-C11, < 2% aromatics, < 0.1 % benzene is subject to REACH restrictions (entry 40).
<i>WGK classification:</i>	WGK class: WGK 1
<i>GISCODE:</i>	GISCODE: BS 40 (M-GP02, M-LL01)
<i>Additional information:</i>	Not applicable.
<i>Volatile Organic Compounds (VOCs) subject to the Tax (OVOC):</i>	VOC content as supplied: Brantho-Korrux "3 in 1": < 450 g/L

Sources:

Law on the protection of mothers at work, in training and in studies (Mutterschutzgesetz - MuSchG) 23.05.2017 (BGBl. I S. 1228).
The Aerosol Packaging Ordinance of September 27, 2002 (BGBl. I p. 3777, 3805), amended with the thirteenth Ordinance on the Product Safety Act (Aerosol Packaging Ordinance) (13th ProdSV) of November 8, 2011 (BGBl. L p. 2178).
Twelfth ordinance for the implementation of the Federal Immission Control Act (Major Accidents Ordinance - 12th BImSchV).
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV).
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 (CLP).
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2. Chemical safety assessment

No

SECTION 16: OTHER INFORMATION

Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.
H220, Extremely flammable gas.
H226, Flammable liquid and vapour.
H280, Contains gas under pressure; may explode if heated.
H304, May be fatal if swallowed and enters airways.
H319, Causes serious eye irritation.
H335, May cause respiratory irritation.
H336, May cause drowsiness or dizziness.

Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CE = Conformité Européenne (European conformity)
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial chemical Substances
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EuPCS = European Product Categorisation System
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
GWP = Global warming potential
IARC = International Agency for Research on Cancer (IARC)
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
SCL = A specific concentration limit
SVHC = Substances of Very High Concern
STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
STOT-SE = Specific Target Organ Toxicity - Single Exposure
TWA = Time weighted average
UN = United Nations
UVBC = Unknown or variable composition, complex reaction products or of biological materials
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

The classification of the mixture in regard to physical hazards has been based on experimental data.

The safety data sheet is validated by

Dr. Stephan Gleich

Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

It is recommended to hand over this safety data sheet to the actual user of the product.
Information in this safety data sheet cannot be used as a product specification.
Country-language: DE-en