

KORASILON Trennmittel M

Version number: GHS 2.0
Replaces version of: 25.02.2021 (GHS 1)

Revision: 20.10.2022

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

1.1 Product identifier

Trade name **KORASILON Trennmittel M**

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

Relevant identified uses
Aerosol
Release agent

1.3 Details of the supplier of the safety data sheet

Kurt Obermeier GmbH & Co. KG
Berghäuser Str. 70
57319 Bad Berleburg
Germany

Telephone: +49 2751 5240
Telefax: +49 2751 5041
e-mail: info@obermeier.de
Website: www.obermeier.de

e-mail (competent person) **sdb@obermeier.de**

1.4 Emergency telephone number

Name	Telephone
24h	+49 (0) 700241 2112 (KOR); +1 872 5888271 (KOR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.3	aerosols	1	Aerosol 1	H222,H229
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.8D	specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336
4.1C	hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

Shall not be classified as an aspiration hazard: it is an aerosol and a pool of product cannot be formed

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling

- Signal word **danger**
- Pictograms

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GHS02, GHS07, GHS09



- Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

- Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P312	Call a POISON CENTRE/doctor if you feel unwell.
P405	Store locked up.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501	Dispose of contents/container to recovery or disposal facilities.

- Hazardous ingredients for labelling Hydrocarbons, C6, isoalkanes, <5% n-hexane; pentane

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Specific Conc. Limits	M-Factors
Hydrocarbons, C6, isoalkanes, <5% n-hexane	CAS No 64742-49-9	25 – < 50	Flam. Liq. 2 / H225 Skin Irrit. 2 / H315 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Chronic 2 / H411		
butane	CAS No 106-97-8	25 – < 50	Flam. Gas 1 / H220 Press. Gas C / H280		
pentane	CAS No 109-66-0	25 – < 50	Flam. Liq. 2 / H225 STOT SE 3 / H336 Asp. Tox. 1 / H304 Aquatic Chronic 2 / H411 EUH066		

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Name of substance	Identifier	Wt%	Classification acc. to GHS	Specific Conc. Limits	M-Factors
isobutane	CAS No 75-28-5	5 – < 10	Flam. Gas 1 / H220 Press. Gas C / H280		
propane	CAS No 74-98-6	5 – < 10	Flam. Gas 1 / H220 Press. Gas C / H280		

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. Remove victim out of the danger area. Do not leave affected person unattended. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

Remove casualty to fresh air and keep warm and at rest. In case of accident or if you feel unwell, seek medical advice immediately (show the label or safety data sheet where possible). Provide fresh air. In case of respiratory tract irritation, consult a physician.

Following skin contact

After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap. In case of skin reactions, consult a physician.

Following eye contact

Rinse immediately carefully and thoroughly with eye shower or water. If eye irritation persists: Get medical advice/attention.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation. May cause drowsiness or dizziness.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Alcohol resistant foam, Water spray, Water mist, BC-powder, Sand

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO₂)

5.3 Advice for firefighters

In case of fire toxic gases may be formed. In case of fire and/or explosion do not breathe fumes. Wear self-contained breathing apparatus. Do not allow firefighting water to enter drains or water courses. Fight fire with normal precautions from a reasonable distance. Collect contaminated firefighting water separately.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Use personal protection equipment. Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Prevent spread over a wide area (e.g. by containment or oil barriers). Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Take up mechanically, Covering of drains

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use only in well-ventilated areas. Do not breathe gas/fumes/vapour/spray. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Do not pierce or burn, even after use.

Advice on general occupational hygiene

Avoid contact with skin and eyes. Wash hands after use. Keep away from food, drink and animal feedingstuffs. Never place chemicals in containers that are normally used for food or drink.

7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool, well-ventilated place. Keep only in original container.

Managing of associated risks

- Flammability hazards

Do not spray on an open flame or other ignition source. Protect from sunlight. Heating causes rise in pressure with risk of bursting.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

No information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

Does not contain substances above concentration limits fixing an occupational exposure limit.

Relevant DNELs of components of the mixture

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-9	DNEL	5,306 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-9	DNEL	13,964 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-9	DNEL	1,131 mg/m ³	human, inhalatory	consumer (private households)	chronic - systemic effects
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-9	DNEL	1,377 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-9	DNEL	1,301 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
pentane	109-66-0	DNEL	3,000 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
pentane	109-66-0	DNEL	432 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
pentane	109-66-0	DNEL	643 mg/m ³	human, inhalatory	consumer (private households)	chronic - systemic effects
pentane	109-66-0	DNEL	214 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
pentane	109-66-0	DNEL	214 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Relevant PNECs of components of the mixture

Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
pentane	109-66-0	PNEC	230 µg/l	aquatic organisms	freshwater	short-term (single instance)
pentane	109-66-0	PNEC	230 µg/l	aquatic organisms	marine water	short-term (single instance)
pentane	109-66-0	PNEC	3,600 µg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
pentane	109-66-0	PNEC	1.2 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)

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Relevant PNECs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
pentane	109-66-0	PNEC	1.2 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
pentane	109-66-0	PNEC	0.55 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Personal protective equipment shall be used when the risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Appropriate engineering controls

Open windows, door, to allow sufficient ventilation. If this is not possible employ a fan to increase air exchange.

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection.

Skin protection

- Hand protection

Wear protective gloves.

- Type of material

NBR: acrylonitrile-butadiene rubber

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

insufficient ventilation, full face mask/half mask/quarter mask (EN 136/140), type: A-P2 (combined filters against particles and organic gases and vapours, colour code: Brown/White)

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid, gaseous (spray aerosol)
Colour	colourless
Odour	faintly perceptible
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	flammable aerosol in accordance with GHS criteria

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Lower and upper explosion limit	not determined
Flash point	ca. -60 °C
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not applicable
Solubility(ies)	not determined

Partition coefficient

Partition coefficient n-octanol/water (log value)	not determined
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Vapour pressure	ca. 2,000 hPa at 20 °C
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Density and/or relative density

Density	ca. 0.63 g/cm ³ at 20 °C
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (aerosol)
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9.2 Other information	there is no additional information
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SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains re-active substance(s). Risk of ignition.

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Do not spray on an open flame or other ignition source. Keep away from heat.

Hints to prevent fire or explosion

Protect from sunlight.

10.5 Incompatible materials

Oxidisers

10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

The classification criteria for these hazard classes are not met.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

The classification criteria for this hazard class are not met.

Respiratory or skin sensitisation

The classification criteria for these hazard classes are not met.

Germ cell mutagenicity

The classification criteria for this hazard class are not met.

Carcinogenicity

The classification criteria for this hazard class are not met.

Reproductive toxicity

The classification criteria for this hazard class are not met.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

The classification criteria for this hazard class are not met.

Aspiration hazard

Shall not be classified as an aspiration hazard: it is an aerosol and a pool of product cannot be formed.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Degradability of components of the mixture

Name of sub-stance	CAS No	Process	Degradation rate	Time	Method	Source
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-9	oxygen depletion	83 %	10 d		ECHA
pentane	109-66-0	oxygen depletion	3 %	7 d		ECHA

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12.3 Bioaccumulative potential

The product has not been tested.

Bioaccumulative potential of components of the mixture				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Hydrocarbons, C6, isoalkanes, <5% n-hexane	64742-49-9	501.2	3.6 (pH value: 7, 20 °C)	
butane	106-97-8		1.09 (pH value: 7, 20 °C)	
pentane	109-66-0	171	3.45 (pH value: 7, 25 °C)	
propane	74-98-6		1.09 (pH value: 7, 20 °C)	
isobutane	75-28-5		1.09 (pH value: 7, 20 °C)	

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Endocrine disrupting properties

None of the ingredients are listed

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste. Consult the appropriate local waste disposal expert about waste disposal.

Waste treatment-relevant information

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste (Basel Convention)

Properties of waste which render it hazardous

H3 Flammable liquids

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

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SECTION 14: Transport information

14.1 UN number or ID number	1950
UN RTDG	UN 1950
IMDG-Code	UN 1950
ICAO-TI	UN 1950
14.2 UN proper shipping name	
UN RTDG	AEROSOLS
IMDG-Code	AEROSOLS
ICAO-TI	Aerosols, flammable
14.3 Transport hazard class(es)	
UN RTDG	2.1
IMDG-Code	2.1
ICAO-TI	2.1
14.4 Packing group	not assigned
14.5 Environmental hazards	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment)	Hydrocarbons, C6, isoalkanes, <5% n-hexane
14.6 Special precautions for user	
There is no additional information.	
14.7 Maritime transport in bulk according to IMO instruments	
The cargo is not intended to be carried in bulk.	

Information for each of the UN Model Regulations

Transport information - National regulations - Additional information (UN RTDG)

UN number	1950
Class	2.1
Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	2.1, fish and tree



Special provisions (SP)	63, 190, 277, 327, 344, 381, 959 (UN RTDG)
Excepted quantities (EQ)	E0 (UN RTDG)
Limited quantities (LQ)	1 L (UN RTDG)

International Maritime Dangerous Goods Code (IMDG) - Additional information

Marine pollutant	yes (hazardous to the aquatic environment)
Danger label(s)	2.1, fish and tree



Special provisions (SP)	63, 190, 277, 327, 344, 381, 959
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Excepted quantities (EQ)	E0
Limited quantities (LQ)	1 L
EmS	F-D, S-U
Stowage category	-

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	2.1



Special provisions (SP)	A145, A167
Excepted quantities (EQ)	E0
Limited quantities (LQ)	30 kg

SECTION 15: Regulatory information

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

There is no additional information.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
Asp. Tox.	Aspiration hazard
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EmS	Emergency Schedule
Flam. Gas	Flammable gas
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization

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Abbr.	Descriptions of used abbreviations
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
log KOW	n-Octanol/water
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
Press. Gas	Gas under pressure
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STOT SE	Specific target organ toxicity - single exposure
UN RTDG	UN Recommendations on the Transport of Dangerous Good
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
 Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Internal code

OBERMEIER 000890