



DETMOL-PER

Revision date: 02.08.2021

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H304	May be fatal if swallowed and enters airways.
H302+H332	Harmful if swallowed or if inhaled.
H335	May cause respiratory irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P102	Keep out of reach of children.
P101	If medical advice is needed, have product container or label at hand.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapour/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331	Do NOT induce vomiting.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents/container to in accordance with local and national regulations.

Special labelling of certain mixtures

EUH066	Repeated exposure may cause skin dryness or cracking.
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2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.
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 is 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
Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation with aromatic hydrocarbons



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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64742-95-6	Solvent naphtha (petroleum), light arom.			< 55 %
	265-199-0		01-2119455851-35	
	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411 EUH066			
52645-53-1	Permethrin (ISO)			< 25 %
	258-067-9	613-058-00-2		
	Acute Tox. 4, Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H332 H302 H317 H400 H410			
64742-47-8	Distillates (petroleum), hydrotreated light			< 10 %
	265-149-8			
	Asp. Tox. 1; H304			
26264-06-2	Calcium dodecylbenzenesulphonate			< 5 %
	247-557-8		01-2120122335-68	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 4; H302 H315 H318 H413			
89997-63-7	Chrysanthemum cinerariaefolium, extract (pyrethrines)			< 5 %
	289-699-3			
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H332 H312 H302 H400 H410			
78-83-1	2-Methylpropan-1-ol			< 5 %
	201-148-0	603-108-00-1	01-2119484609-23	
	Flam. Liq. 3, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, STOT SE 3; H226 H315 H318 H335 H336			

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
52645-53-1	258-067-9	Permethrin (ISO)	< 25 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); oral: ATE = 500 mg/kg Aquatic Acute 1; H400: M=1000 Aquatic Chronic 1; H410: M=1000		
26264-06-2	247-557-8	Calcium dodecylbenzenesulphonate	< 5 %
	oral: ATE = 500 mg/kg		
89997-63-7	289-699-3	Chrysanthemum cinerariaefolium, extract (pyrethrines)	< 5 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg; oral: ATE = 500 mg/kg Aquatic Acute 1; H400: M=100 Aquatic Chronic 1; H410: M=100		
78-83-1	201-148-0	2-Methylpropan-1-ol	< 5 %
	inhalation: LC50 = > 24 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2830 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures



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General information

Remove contaminated soaked clothing immediately.
If you feel unwell, seek medical advice.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.
In the event of symptoms refer for medical treatment.

After contact with skin

Wash off immediately with plenty of water and soap for at least 15 minutes.
Consult a physician.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Consult (eye) doctor immediately.

After ingestion

Summon a doctor immediately.
Do not induce vomiting.
Rinse mouth immediately and drink plenty of water.
Never give anything by mouth to an unconscious person.
Induce vomiting only upon the advice of a physician.
Attention. Beware, danger of aspiration.

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

Harmful if swallowed or if inhaled.
Causes serious eye damage.
May cause respiratory irritation.
May cause drowsiness or dizziness.
May be fatal if swallowed and enters airways.
May cause an allergic skin reaction.
Repeated exposure may cause skin dryness or cracking.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Fire may produce:
Carbon monoxide (CO), carbon dioxide (CO₂) and sulphur oxides (SO_x)
Chlorine compounds

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Cool containers at risk with water spray jet.
The vapour/air mixture is explosive, even in empty, uncleaned receptacles.
Vapours are heavier than air and spread along ground.
Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.



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Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

- Use only explosion-proof equipment.
- Ensure adequate ventilation.
- Remove persons to safety.

For non-emergency personnel

- Do not breathe vapours.
- Avoid contact with skin, eyes and clothing.

For emergency responders

- In case of vapour formation use respirator.
- Use personal protective clothing.

6.2. Environmental precautions

- Do not discharge into the drains/surface waters/ground water.
- Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

For containment

- Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
- Shovel into suitable container for disposal.
- Clean contaminated surface thoroughly.

6.4. Reference to other sections

- Observe protective instructions (see Sections 7 and 8).
- Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

- Keep container tightly closed.
- Vapours are heavier than air and spread along ground.
- Avoid contact with the skin and the eyes.
- Use only in thoroughly ventilated areas.
- Do not breathe vapours or spray mist.

Advice on protection against fire and explosion

- Do not smoke - volatile.
- Keep away from heat and sources of ignition.
- Take precautionary measures against static discharges.
- Use only explosion-proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

- Keep container tightly closed in a dry, cool and well-ventilated place.
- Pay attention to anti-explosion rules.

Hints on joint storage

- Incompatible with oxidizing agents.



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Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Pesticide

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
78-83-1	2-Methylpropan-1-ol	50	154		TWA (8 h)	WEL
		75	231		STEL (15 min)	WEL

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

- Do not breath vapours or spray mist.
- Wash hands before breaks and immediately after handling the product.
- When using do not eat, drink or smoke.
- Treat subsequently with skin cream.
- Take off immediately all contaminated clothing.
- Avoid contact with skin, eyes and clothing.

Eye/face protection

- Tightly fitting goggles (EN 166).
- Eye wash bottle with pure water (EN 15154).

Hand protection

- Protective gloves resistant to chemicals made of nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Camatril Velours 730> made by www.kcl.de.
- This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
- Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

- Wear standard protective suit (plant protection) when spreading/handling the product (CE 93 0120). @000000006752
- Rubber apron (EN 467). @000000006753

Respiratory protection

- Use protective face mask with A1-P3 (40 ASt) filter when spraying (EN 14387). (EN 141)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Brownish
Odour:	Hydrocarbon-like



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Test method

pH-Value:	n.d.
Changes in the physical state	
Melting point/freezing point:	n.d.
Boiling point or initial boiling point and boiling range:	> 166 °C *)
Sublimation point:	n.a.
Softening point:	n.d.
Flash point:	35 °C
Flammability	
Solid/liquid:	n.a.
Explosive properties	
The product is considered non-explosive; nevertheless explosive vapour/air mixture can be generated.	
Lower explosion limits:	0,7 vol. % *)
Upper explosion limits:	7,0 vol. % *)
Auto-ignition temperature:	480 °C *)
Self-ignition temperature	
Solid:	n.a.
Gas:	n.a.
Decomposition temperature:	n.d.
Oxidizing properties	
Not oxidising.	
Vapour pressure: (at 20 °C)	3 hPa *)
Density (at 20 °C):	0,94 g/cm ³
Bulk density:	n.a.
Water solubility: (at 20 °C)	Emulsifiable
Solubility in other solvents	
n.d.	
Partition coefficient n-octanol/water:	n.d.
Viscosity / dynamic:	n.d.
Viscosity / kinematic: (at 40 °C)	< 20,5 mm ² /s
Flow time:	n.d.
Relative vapour density:	n.d.
Evaporation rate:	n.d.
Solvent separation test:	n.d.
Solvent content:	< 65 %

9.2. Other information

*) Solvent naphtha (petroleum), light arom.

SECTION 10: Stability and reactivity



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10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with oxidizing agents.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.
Vapour/air mixtures are explosive at intensive warming.
Heating can release vapours which can be ignited.

10.5. Incompatible materials

oxidizing agents

10.6. Hazardous decomposition products

No hazardous decomposition products known.
Fire may produce:
Carbon monoxide, carbon dioxide, sulphur oxides.
chlorine compounds

SECTION 11: Toxicological information

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

Acute toxicity

Harmful if swallowed.
Harmful if inhaled.
No toxicological data available.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Causes serious eye damage.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause an allergic skin reaction. (Permethrin (ISO))

Carcinogenic/mutagenic/toxic effects for reproduction

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

STOT-single exposure

May cause respiratory irritation. (Solvent naphtha (petroleum), light arom.)
May cause drowsiness or dizziness. (Solvent naphtha (petroleum), light arom.)

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

May be fatal if swallowed and enters airways.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

11.2. Information on other hazards

Endocrine disrupting properties

No data available



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Other information

Repeated exposure may cause skin dryness or cracking.

High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects.

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Occasionally literature hints report that contact with Pyrethrum compounds may trigger hay fever similar reactions in particularly sensible persons.

Skin contact with this product may cause cauterisation or prickling sensation without visible skin irritation. Such an effect is to be considered a warning. Further exposure is strictly to be avoided. If symptoms do not subside, or other symptoms should appear, seek medical advice.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Severe hazard to waters

Further information

Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

List of Wastes Code - residues/unused products

200119 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); Pesticides; hazardous waste

List of Wastes Code - used product

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste



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Contaminated packaging

Re-using the polluted packaging materials is not allowed.
Contaminated packagings are to be treated like the product itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN 3295
14.2. UN proper shipping name: HYDROCARBONS, LIQUID, N.O.S.
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Limited quantity: 5 L / 30 kg
Excepted quantity: E1
Transport category: 3
Hazard No: 30
Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 3295
14.2. UN proper shipping name: HYDROCARBONS, LIQUID, N.O.S.
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Classification code: F1
Limited quantity: 5 L / 30 kg
Excepted quantity: E1

Marine transport (IMDG)

14.1. UN number: UN 3295
14.2. UN proper shipping name: HYDROCARBONS, LIQUID, N.O.S. (Permethrin)
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Hazard label: 3



Marine pollutant: Yes
Limited quantity: 5 L / 30 kg
Excepted quantity: E1
EmS: F-E, S-D



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Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 3295
14.2. UN proper shipping name:	HYDROCARBONS, LIQUID, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3



Limited quantity Passenger:	10 L
Passenger LQ:	Y344
Excepted quantity:	E1
IATA-packing instructions - Passenger:	355
IATA-max. quantity - Passenger:	60 L
IATA-packing instructions - Cargo:	366
IATA-max. quantity - Cargo:	220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes



14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Maritime transport in bulk according to IMO instruments

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 28, Entry 40, Entry 75

2004/42/EC (VOC):	< 65 %
Information according to 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS
Additional information:	E1

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

Biocide registry number: BAuA-Reg. Nr. N-10976

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

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SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,6,7,10,11,12,14,15.

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 4; H302	Calculation method
Acute Tox. 4; H332	Calculation method
Asp. Tox. 1; H304	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 1; H410	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H302+H332	Harmful if swallowed or if inhaled.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.

Safety Data Sheet
according to Regulation (EC) No 1907/2006

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H335	May cause respiratory irritation.
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.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)