SAFETY DATA SHEET

DUXOLA POWER GEL

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

1.1. Product identifier

Trade name

DUXOLA POWER GEL

Product no.

25210, 25212, 25214

Unique formula identifier (UFI)

40PH-K0YX-4207-7XY3

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

Relevant identified uses of the substance or mixture

Maling fjerner

Uses advised against

None known.

1.3. Details of the supplier of the safety data sheet

Company and address

Krefting & Co AS
Postboks 14
1314 Vøyenenga
Norway
+47 67526085
http://www.krefting.no/

Contact person

Manish Budathoki

E-mail

manish.budathoki@krefting.no

Revision

18/02/2025

SDS Version

5.0

Date of previous version

12/08/2024 (4.0)

1.4. Emergency telephone number

In urgent situations: Call 113 and request the poison information centre. (24h service)
Poison Center at Tel.: + 47 22 59 13 00
See section 4 on 'First Aid Measures'

SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP).

2.1. Classification of the substance or mixture

Flam. Liq. 2; H225, Highly flammable liquid and vapour.

Skin Irrit. 2; H315, Causes skin irritation.

Skin Sens. 1B; H317, May cause an allergic skin reaction.

Eye Dam. 1; H318, Causes serious eye damage.

STOT SE 3; H336, May cause drowsiness or dizziness.

2.2. Label elements

Hazard pictogram(s)

Signal word

Danger

Hazard statement(s)

Highly flammable liquid and vapour. (H225)

Causes skin irritation. (H315)

May cause an allergic skin reaction. (H317)

Causes serious eye damage. (H318)

May cause drowsiness or dizziness. (H336)

Precautionary statement(s)

General

If medical advice is needed, have product container or label at hand. (P101)

Keep out of reach of children. (P102)

Prevention

Wear face protection/protective gloves/protective clothing. (P280)

Response

IF ON SKIN: Wash with plenty of water and soap. (P302+P352)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)

Take off contaminated clothing and wash it before reuse. (P362+P364)

Storage

Store in a well-ventilated place. Keep container tightly closed. (P403+P233)

Disposal

Dispose of contents/container in accordance with local regulation

(P501)

Hazardous substances

1,3-Dioxolane

n-butylacetat

Methyl ethyl ketone

Additional labelling

UFI: 40PH-K0YX-4207-7XY3

2.3. Other hazards

▼Additional warnings

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

1,3-Dioxolane	CAS No.: 646-06-0 EC No.: 211-463-5 REACH: 01-2119490744-29-XXXX Index No.: 605-017-00-2	≤ 50%	Flam. Liq. 2, H225 Eye Dam. 1, H318	
n-butylacetat	CAS No.: 123-86-4 EC No.: 204-658-1 REACH: 01-2119485493-29 Index No.: 607-025-00-1	≤ 30%	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336	[1]
Methyl ethyl ketone	CAS No.: 78-93-3 EC No.: 201-159-0 REACH: 01-2119457290-43 Index No.:	≤ 30%	EUH066 Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1]
Benzyl alcohol	CAS No.: 100-51-6 EC No.: 202-859-9 REACH: 01-2119492630-8 Index No.: 603-057-00-5	≤ 20%	Acute Tox. 4, H302 Skin Sens. 1B, H317 Eye Irrit. 2, H319 Acute Tox. 4, H332	
Formic acid ...%	CAS No.: 64-18-6 EC No.: 200-579-1 REACH: 01-2119491174-37-XXXX Index No.: 607-001-00-0	≤ 3%	EUH071 Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Corr. 1A, H314 (SCL: 90.00 %) Skin Corr. 1B, H314 (SCL: 10.00 %) Skin Irrit. 2, H315 (SCL: 2.00 %) Eye Dam. 1, H318 Eye Irrit. 2, H319 (SCL: 2.00 %) Acute Tox. 3, H331	[1]

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.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

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.

Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

Skin contact

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.

Eye contact

If in eyes: Flush eyes with plenty of water or salt water (20-30 °C) for at least 30 minutes and continue until irritation stops. Remove contact lenses. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing during transport.

Ingestion

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.

Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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

IF exposed or concerned:

Get immediate medical advice/attention.

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

Highly flammable liquid and vapour.

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:

Carbon oxides (CO / CO2)

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

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.
Avoid direct contact with spilled substances.
Ensure adequate ventilation, especially in confined areas.
Avoid inhalation of vapours from spilled material.
Contaminated areas may be slippery.

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

Ground and bond container and receiving equipment.
Use explosion-proof [electrical/lighting/ventilating] equipment.
Use non-sparking tools.
Take action to prevent static discharges.
The product should be tested for peroxides before distillation or evaporation and tested for peroxide formation or discarded after 1 year.
Avoid direct contact with the product.
Peroxide formation may be present anywhere in the container, including the sides, bottom, exterior and threaded cap. Peroxide formation in ppm concentrations may not be visually observable and must be identified through the use of appropriate testing procedures. If any of the following conditions exist, the material may be explosively unstable and will require stabilization prior to use:
1. Material appears to be degraded and or contaminated.
2. Material appears to be discolored.
3. Deterioration or distortion of storage container.
4. Thermal shock (sunlight).
5. Age of material exceeds recommended storage time.
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

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.
Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
Take action to prevent static discharges.
Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

Recommended storage material

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

Storage conditions

Incompatible materials

acids

Bases

oxidizing agents

Reducing agents

7.3. Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

n-butylacetat
Long term exposure limit (8 hours) (mg/m³): 241
Long term exposure limit (8 hours) (ppm): 50
Short term exposure limit (15 minutes) (mg/m³): 723
Short term exposure limit (15 minutes) (ppm): 150
Annotations:
E = The EU has set an indicative limit value and/or remark for the substance.
Methyl ethyl ketone
Long term exposure limit (8 hours) (mg/m³): 220
Long term exposure limit (8 hours) (ppm): 75
Annotations:
E = The EU has set an indicative limit value and/or remark for the substance.
Formic acid ...%
Long term exposure limit (8 hours) (mg/m³): 9
Long term exposure limit (8 hours) (ppm): 5
Short term exposure limit (15 minutes) (ppm): 10
Annotations:
E = The EU has set an indicative limit value and/or remark for the substance.
S = Short term value is a value for the average concentration of a chemical in the breathing zone of an employee not to be exceeded for a specified reference period. The reference period is 15 minutes unless otherwise stated.

Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents (Regulations concerning Action and Limit values) FOR-2011-12-06-1358. Last update: FOR-2024-04-05-581.

DNEL

1,3-Dioxolane

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	1.31 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	1.18 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	4.52 mg/m³
Long term – Systemic effects - Workers	Inhalation	3.306 mg/m³
Long term – Systemic effects - General population	Oral	1.31 mg/kg bw/day

Benzyl alcohol

Duration:	Route of exposure:	DNEL:

Long term – Systemic effects - General population	Dermal	4 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	8 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	20 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	40 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	5.4 mg/m³
Long term – Systemic effects - Workers	Inhalation	22 mg/m³
Short term – Systemic effects - General population	Inhalation	27 mg/m³
Short term – Systemic effects - Workers	Inhalation	110 mg/m³
Long term – Systemic effects - General population	Oral	4 mg/kg bw/day
Short term – Systemic effects - General population	Oral	20 mg/kg bw/day

Formic acid ...%

Duration:	Route of exposure:	DNEL:
Long term – Local effects - General population	Inhalation	3 mg/m³
Long term – Local effects - Workers	Inhalation	9.5 mg/m³
Long term – Systemic effects - General population	Inhalation	3 mg/m³
Long term – Systemic effects - Workers	Inhalation	9.5 mg/m³

Methyl ethyl ketone

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	412 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	1161 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	106 mg/m³
Long term – Systemic effects - Workers	Inhalation	600 mg/m³
Short term – Systemic effects - General population	Inhalation	450 mg/m³
Short term – Systemic effects - Workers	Inhalation	900 mg/m³
Long term – Systemic effects - General population	Oral	31 mg/kg bw/day

n-butylacetat

Duration:	Route of exposure:	DNEL:
Long term – Systemic effects - General population	Dermal	3.4 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	7 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	6 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	11 mg/kg bw/day
Long term – Local effects - General population	Inhalation	35.7 mg/m³
Long term – Local effects - Workers	Inhalation	300 mg/m³

Long term – Systemic effects - General population	Inhalation	12 mg/m³
Long term – Systemic effects - Workers	Inhalation	48 mg/m³
Short term – Local effects - General population	Inhalation	300 mg/m³
Short term – Local effects - Workers	Inhalation	600 mg/m³
Short term – Systemic effects - General population	Inhalation	300 mg/m³
Short term – Systemic effects - Workers	Inhalation	600 mg/m³
Long term – Systemic effects - General population	Oral	2 mg/kg bw/day
Short term – Systemic effects - General population	Oral	2 mg/kg bw/day

PNEC

1,3-Dioxolane

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		19.7 mg/L
Freshwater sediment		77.7 mg/kg
Intermittent release (freshwater)		950 µg/L
Marine water		1.97 mg/L
Marine water sediment		7.77 mg/kg
Sewage treatment plant		1 mg/L
Soil		2.62 mg/kg

Benzyl alcohol

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		1-1.02 mg/L
Freshwater sediment		5.27 mg/kg
Intermittent release (freshwater)		2.3 mg/L
Marine water		100-102 µg/L
Marine water sediment		527 µg/kg
Sewage treatment plant		39 mg/L
Soil		456 µg/kg

Formic acid ...%

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		2 mg/L
Freshwater sediment		13.4 mg/kg
Intermittent release (freshwater)		1 mg/L
Marine water		200 µg/L

Marine water sediment		1.34 mg/kg
Sewage treatment plant		7.2 mg/L
Soil		1.5 mg/kg

Methyl ethyl ketone

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		55.8 mg/L
Freshwater sediment		284.74 mg/kg
Intermittent release (freshwater)		55.8 mg/L
Marine water		55.8 mg/L
Marine water sediment		284.7 mg/kg
Predators		1 g/kg
Sewage treatment plant		709 mg/L
Soil		22.5 mg/kg

n-butylacetat

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater		180 µg/L
Freshwater sediment		981 µg/kg
Intermittent release (freshwater)		360 µg/L
Marine water		18 µg/L
Marine water sediment		98.1 µg/kg
Sewage treatment plant		35.6 mg/L
Soil		90.3 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

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Ensure that eyewash stations and safety showers are located within easy reach.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

Hygiene measures

Take off contaminated clothing and wash it before reuse.

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

Type	Class	Colour	Standards	
Må brukes med tilstrekkelig avtrekksventilasjon. Hvis nødvendig, bruk ansiktsmaske med filter ved luft som er farlig å puste inn. Bruk maske med ABEK-standard som beskyttelse mot irriterende nivåer.				

Skin protection

Recommended	Type/Category	Standards	
Ugjennomtrengelige klær. Det som er relevant verneutstyr, avhenger av konsentrasjonen og mengden av farlige stoffer på den aktuelle arbeidsstasjonen.			

Hand protection

Work situation	Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
In case of inadequate ventilation	nitril	0,4mm	>480 min	EN374	

Eye protection

Type	Standards	
		
In the likelihood of direct or incidental exposure, use face protection.	EN166	

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless

Odour / Odour threshold

Characteristic

▼pH

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

Density (g/cm³)

-

Relative density

1,0200 kg/L

Kinematic viscosity

980 mm²/s (40 °C)

Dynamic viscosity

1000 mPa.s (20 °C)

Particle characteristics

Does not apply to liquids.

Phase changes

▼Melting point/Freezing point (°C)

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

Softening point/range (°C)

Does not apply to liquids.

Boiling point (°C)

74-205

Vapour pressure

9.31 Pa (20 °C)

Relative vapour density

Not applicable

▼Decomposition temperature (°C)

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

Data on fire and explosion hazards

Flash point (°C)

-7

Flammability (°C)

The material is ignitable.

Auto-ignition temperature (°C)

274

Lower and upper explosion limit (% v/v)

1 - 20.5

Solubility

Solubility in water

Insoluble

n-octanol/water coefficient (LogKow)

Not applicable

▼Solubility in fat (g/L)

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

9.2. Other information

Evaporation rate (n-butylacetate = 100)

6,000

VOC (g/L)

995,571

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

Stabil under normale temperaturforhold og anbefalt bruk.

10.2. Chemical stability

Produktet er stabilt ved anbefalt lagring og bruk

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Må beskyttes mot sollys og ikke eksponeres for temperaturer over + 50 °C

10.5. Incompatible materials

acids, bases, oxidatants og reduktants.

10.6. Hazardous decomposition products

Brytes ikke ned ved vanlig bruk

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	1,3-Dioxolane
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	3000 mg/kg

Product/substance	1,3-Dioxolane
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	≥ 5000 mg/kg

Product/substance	1,3-Dioxolane
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	≥ 50 mg/L

Product/substance	n-butylacetat
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	≥ 5000 mg/kg

Product/substance	n-butylacetat
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	≥ 5000 mg/kg

Product/substance	n-butylacetat
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	≥ 50 mg/L

Product/substance	Methyl ethyl ketone
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	2737 mg/kg

Product/substance	Methyl ethyl ketone
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	≥ 5000 mg/kg

Product/substance	Methyl ethyl ketone
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	≥ 50 mg/L

Product/substance	Benzyl alcohol
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	1620 mg/kg

Product/substance	Benzyl alcohol
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	≥ 5000 mg/kg

Product/substance	Benzyl alcohol
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	11 mg/L

Product/substance	Formic acid ...%

Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	730 mg/kg

Product/substance	Formic acid ...%
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	≥ 5000 mg/kg

Product/substance	Formic acid ...%
Species:	Rat
Route of exposure:	Inhalation
Test:	LC50
Result:	7,85 mg/L

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye damage.

Respiratory sensitisation

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

Skin sensitisation

May cause an allergic skin reaction.

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

May cause drowsiness or dizziness.

STOT-repeated exposure

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

Aspiration hazard

Due to the viscosity, this product does not present an aspiration hazard.

11.2. Information on other hazards

Long term effects

The product contains substances that cause serious eye damage. Contact with these substances can cause irreversible effects on the eye / serious eye damage.

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	1,3-Dioxolane
Species:	Fish
Test:	LC50
Result:	95,4 mg/L

Product/substance	1,3-Dioxolane
Species:	Fish
Test:	NOEC
Result:	546,3 mg/L

Product/substance	1,3-Dioxolane
Species:	Algae
Test:	NOEC
Result:	877 mg/L

Product/substance	1,3-Dioxolane
Species:	Crustacean, Daphnia
Test:	EC50
Result:	772 mg/L

Product/substance	n-butylacetat
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	18 mg/L

Product/substance	n-butylacetat
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	674,7 mg/L

Product/substance	n-butylacetat
Species:	Algae
Duration:	72 hours
Test:	NOEC
Result:	200 mg/L

Product/substance	n-butylacetat
Species:	Crustacean, Daphnia
Duration:	48 hours
Test:	EC50
Result:	44 mg/L

Product/substance	Methyl ethyl ketone
Species:	Fish
Duration:	96 hours
Test:	LC50
Result:	2993 mg/L

Product/substance	Methyl ethyl ketone
Species:	Fish
Duration:	96 hours
Test:	NOEC
Result:	1170 mg/L

Product/substance	Methyl ethyl ketone
Species:	Algae
Duration:	96 hours
Test:	EC50
Result:	2029 mg/L

Product/substance	Methyl ethyl ketone
Species:	Crustacean, Daphnia
Duration:	48 hours
Test:	EC50
Result:	308 mg/L

Product/substance	Methyl ethyl ketone
Species:	Crustacean, Daphnia
Duration:	48 hours
Test:	NOEC
Result:	68 mg/L

Product/substance	Benzyl alcohol
Species:	Fish
Duration:	72 hours
Test:	LC50
Result:	460 mg/L

Product/substance	Benzyl alcohol
Species:	Algae
Duration:	72 hours
Test:	EC50
Result:	770 mg/L

Product/substance	Benzyl alcohol
Species:	Crustacean, Daphnia
Duration:	48 hours
Test:	EC50
Result:	230 mg/L

Product/substance	Benzyl alcohol

Species:	Crustacean, Daphnia
Duration:	72 hours
Test:	NOEC
Result:	310 mg/L

Product/substance	Formic acid ...%
Species:	Fish, Danio rerio
Duration:	96 hours
Test:	LC50
Result:	130 mg/L

Product/substance	Formic acid ...%
Species:	Algae, Pseudokirchneriella subcapitata
Duration:	72 hours
Test:	EC50
Result:	1240 mg/L

Product/substance	Formic acid ...%
Species:	Crustacean, Daphnia
Duration:	48 hours
Test:	EC50
Result:	365 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

Product is covered by the regulations on hazardous waste. (*)
HP 3 - Flammable
HP 4 - Irritant (skin irritation and eye damage)
HP 13 – Sensitising
Dispose of contents/container to an approved waste disposal plant.
Disposal to the sewer is discouraged.
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

EWC code

It is not permitted to release the substance into the drain. Should be removed by an approved service company. Any restrictions set by local authorities must always be followed.

Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

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 information:
ADR	UN1993	FLAMMABLE LIQUID, N.O.S.	Transport hazard class: 3 Label: 3 Classification code: F1 	II	No	Limited quantities: 1 L Tunnel restriction code: (D/E) See below for additional information.
IMDG	UN1993	FLAMMABLE LIQUID, N.O.S.	Transport hazard class: 3 Label: 3 Classification code: F1 	II	No	Limited quantities: 1 L EmS: F-E S-E See below for additional information.
IATA	UN1993	FLAMMABLE LIQUID, N.O.S.	Transport hazard class: 3 Label: 3 Classification code: F1 	II	No	See below for additional information.

▼Additional information

Not dangerous goods according to ADR, IATA and IMDG.

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

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

Regulation on drug precursors

Methyl ethyl ketone is included (Category 3)

REACH, Annex XVII

1,3-Dioxolane is subject to REACH restrictions (entry 40).
n-butylacetat is subject to REACH restrictions (entry 40).
Methyl ethyl ketone is subject to REACH restrictions (entry 40).
Formic acid ...% is subject to REACH restrictions (entry 40).

Labelling of contents according to Detergents Regulation (EC) No 648/2004

According to (EC) 648/2004: aliphatic hydrocarbons < 5%

Product registration number

637073

Declaration of chemicals

If the product is imported or produced in more than 100 kg/year it is subject to registration in the Product Register because it is classified as hazardous.

Additional information

Tactile warning.

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.
Act no. 62 of 17th June 2005 relating to working environment, working hours and employment protection, etc. (Working Environment Act).
Regulation of 1 July 2016 no. 569 on measures to prevent and limit the consequences of major accidents in companies where hazardous chemicals occur (the Major Accidents Regulations).
Commission Regulation (EU) No 1357/2014 of 18 December 2014 on waste.
Council Regulation (EC) No 273/2004 on drug precursors.
Regulation of 15 May 2015 no. 541 on declaring chemicals to the product register (Declaration Regulations)
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.
EUH071, Corrosive to the respiratory tract.
H225, Highly flammable liquid and vapour.
H226, Flammable liquid and vapour.
H302, Harmful if swallowed.
H314, Causes severe skin burns and eye damage.
H315, Causes skin irritation.
H317, May cause an allergic skin reaction.
H318, Causes serious eye damage.
H319, Causes serious eye irritation.
H331, Toxic if inhaled.
H332, Harmful if inhaled.
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 of health hazards is in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP).
The classification of the mixture in regard to physical hazards has been based on experimental data.

The safety data sheet is validated by

Manish Budathoki

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.
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: NO-en