

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Graffiti Remover Red F

Product no.

-

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

Graffiti Removal

Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

Blue & Green AB
Stenorsvägen 52
261 44 Landskrona
Sweden
Tfn: +46 418 399000
Fax: +46 418 13199
www.blueandgreen.se

E-mail

info@blueandgreen.se

SDS date

2020-11-18

SDS Version

1.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Acute Tox. 4; H302

Skin Irrit. 2; H315

Eye Irrit. 2; H319

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)**Signal word**

Warning

Hazard statement(s)

Harmful if swallowed. (H302)

Causes skin irritation. (H315)

Causes serious eye irritation. (H319)

According to EC-Regulation 2015/830

Precautionary statements

General	If medical advice is needed, have product container or label at hand. (P101). Keep out of reach of children. (P102).
Prevention	Wash hands/exposed skin thoroughly after handling. (P264). Do not eat, drink or smoke when using this product. (P270).
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
Storage	-
Disposal	Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

1-butylpyrrolidin-2-one; Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched

Additional labelling

Not applicable

Unique formula identifier (UFI)

YU9X-GWVE-J000-T6C0

2.3. Other hazards

Not applicable

Additional warnings

Tactile warning.

VOC (volatile organic compound)

Not applicable

SECTION 3: Composition/information on ingredients

3.1/3.2. Substances/Mixtures

NAME: 1-butylpyrrolidin-2-one
IDENTIFICATION NOS.: CAS-no: 3470-98-2 EC-no: 222-437-8 REACH-no: 01-2120062728-48
CONTENT: 25-40%
CLP CLASSIFICATION: Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2
H302, H315, H319

NAME: dimethyl glutarate
IDENTIFICATION NOS.: CAS-no: 1119-40-0 EC-no: 214-277-2 REACH-no: 01-2119900156-49
CONTENT: 25-40%
CLP CLASSIFICATION: NA

NAME: dimethyl succinate
IDENTIFICATION NOS.: CAS-no: 106-65-0 EC-no: 203-419-9 REACH-no: 01-2119486681-29
CONTENT: 10 - <15%
CLP CLASSIFICATION: NA

NAME: (2-methoxymethylethoxy)propanol
IDENTIFICATION NOS.: CAS-no: 34590-94-8 EC-no: 252-104-2 REACH-no: 01-2119450011-60
CONTENT: 5 - <10%
CLP CLASSIFICATION:
NOTE: O L

NAME: 2-(2-ethoxyethoxy)ethanol
IDENTIFICATION NOS.: CAS-no: 111-90-0 EC-no: 203-919-7 REACH-no: 01-2119475105-42
CONTENT: 2.5 - <5%
CLP CLASSIFICATION: NA

NAME: dimethyl adipate
IDENTIFICATION NOS.: CAS-no: 627-93-0 EC-no: 211-020-6 REACH-no: 01-2119911093-50
CONTENT: 2.5 - <5%
CLP CLASSIFICATION: NA

NAME: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
IDENTIFICATION NOS.: CAS-no: 69011-36-5 EC-no: 931-138-8 REACH-no: -
CONTENT: 1 - <2.5%
CLP CLASSIFICATION: Acute Tox. 4, Eye Dam. 1
H302, H318

(*) O = Organic solvent L = European occupational exposure limit. See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

Other information

According to EC-Regulation 2015/830

ATEmix(oral) = 993.736 - 1490.604
 Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 4.3088 - 6.4632
 Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 3.0992 - 4.6488

Detergent:
 < 5%: NON-IONIC SURFACTANTS

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. The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service). 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

Bring the person into fresh air and stay with him/her.

Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water.

Eye contact

Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under the upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately and bring the safety data sheet or label. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning to the mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

Burns

Not applicable

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

This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure 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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist.

5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Nitrogen oxides. Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. 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.

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

No specific requirements.

6.2. Environmental precautions

No specific requirements.

6.3. Methods and material for containment and cleaning up

According to EC-Regulation 2015/830

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection.

7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature

No data available.

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

OEL

(2-methoxymethylethoxy)propanol

Long-term exposure limit (8-hour TWA reference period): 50 ppm | 308 mg/m³

Short-term exposure limit (15-minute reference period): - ppm | - mg/m³

Comments: Sk (Sk = Can be absorbed through skin.)

DNEL / PNEC

DNEL (dimethyl succinate): 1,1mg/m³

Exposure: Inhalation

Duration of Exposure: Short term – Local effects - Workers

DNEL (dimethyl succinate): 6.8mg/kg/d

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (dimethyl succinate): 33,5mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (dimethyl succinate): 1,1mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Local effects - Workers

DNEL (dimethyl succinate): 12,6mg/kg

Exposure: Dermal

Duration of Exposure: Short term – Systemic effects - Workers

DNEL (dimethyl succinate): 67mg/m³

Exposure: Inhalation

Duration of Exposure: Short term – Systemic effects - Workers

DNEL (dimethyl glutarate): 8,3mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Local effects - Workers

DNEL (dimethyl glutarate): 49,8mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Local effects - Workers

DNEL (dimethyl glutarate): 5mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Local effects - General population

DNEL (dimethyl glutarate): 50mg/m³

Exposure: Inhalation

Duration of Exposure: Short term – Local effects - General population

DNEL ((2-methoxymethylethoxy)propanol): 283 mg/kg bw/day

According to EC-Regulation 2015/830

Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL ((2-methoxymethylethoxy)propanol): 308 mg/kg
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL ((2-methoxymethylethoxy)propanol): 121 mg/kg bw/day
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL ((2-methoxymethylethoxy)propanol): 37.2 mg/m³
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL ((2-methoxymethylethoxy)propanol): 36 mg/kg bw/day
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-(2-ethoxyethoxy)ethanol): 50 mg/kg bw/d
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (2-(2-ethoxyethoxy)ethanol): 37 mg/m³
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (2-(2-ethoxyethoxy)ethanol): 18 mg/m³
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - Workers

DNEL (2-(2-ethoxyethoxy)ethanol): 25 mg/kg bw/d
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-(2-ethoxyethoxy)ethanol): 18.3 mg/m³
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-(2-ethoxyethoxy)ethanol): 25 mg/kg bw/d
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

DNEL (2-(2-ethoxyethoxy)ethanol): 9 mg/m³
Exposure: Inhalation
Duration of Exposure: Long term – Local effects - General population

DNEL (1-butylpyrrolidin-2-one): 4mg/kg
Exposure: Oral
Duration of Exposure: Short term – Systemic effects - General population

DNEL (1-butylpyrrolidin-2-one): 4mg/kg
Exposure: Oral
Duration of Exposure: Long term – Systemic effects - General population

DNEL (1-butylpyrrolidin-2-one): 5mg/kg
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - General population

DNEL (1-butylpyrrolidin-2-one): 4.29mg/m³
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - General population

DNEL (1-butylpyrrolidin-2-one): 10mg/kg
Exposure: Dermal
Duration of Exposure: Long term – Systemic effects - Workers

DNEL (1-butylpyrrolidin-2-one): 24.1mg/m³
Exposure: Inhalation
Duration of Exposure: Long term – Systemic effects - Workers

PNEC (dimethyl succinate): 0,05mg/l
Exposure: Freshwater

According to EC-Regulation 2015/830

PNEC (dimethyl succinate): 0,005mg/l
Exposure: Marine water

PNEC (dimethyl succinate): 0,5mg/l
Exposure: Intermittent release

PNEC (dimethyl succinate): 10mg/l
Exposure: Sewage Treatment Plant

PNEC (dimethyl succinate): 0,137mg/kg
Exposure: Freshwater sediment

PNEC (dimethyl succinate): 0,014mg/kg
Exposure: Marine water sediment

PNEC (dimethyl adipate): 0,018mg/l
Exposure: Freshwater

PNEC (dimethyl adipate): 0,0018mg/l
Exposure: Marine water

PNEC (dimethyl adipate): 0,18mg/l
Exposure: Intermittent release

PNEC (dimethyl adipate): 0,16mg/kg
Exposure: Freshwater sediment

PNEC (dimethyl adipate): 0,016
Exposure: Marine water sediment

PNEC (dimethyl adipate): 0,09mg/kg
Exposure: Soil

PNEC (dimethyl adipate): 10mg/l
Exposure: Sewage Treatment Plant

PNEC (dimethyl glutarate): 0,018mg/l
Exposure: Freshwater

PNEC (dimethyl glutarate): 0,0018/mg/l
Exposure: Marine water

PNEC (dimethyl glutarate): 0,018/mg/l
Exposure: Intermittent release

PNEC (dimethyl glutarate): 0,16mg/kg
Exposure: Freshwater sediment

PNEC (dimethyl glutarate): 0,016mg/kg
Exposure: Marine water sediment

PNEC (dimethyl glutarate): 0,09mg/kg
Exposure: Soil

PNEC (dimethyl glutarate): 10mg/l
Exposure: Sewage Treatment Plant

PNEC ((2-methoxymethylethoxy)propanol): 19 mg/l
Exposure: Freshwater

PNEC ((2-methoxymethylethoxy)propanol): 1.9 mg/l
Exposure: Marine water

PNEC ((2-methoxymethylethoxy)propanol): 190 mg/l
Exposure: Intermittent release

PNEC ((2-methoxymethylethoxy)propanol): 70.2 mg/kg/dwt
Exposure: Freshwater sediment

PNEC ((2-methoxymethylethoxy)propanol): 7.02 mg/kg/dwt
Exposure: Marine water sediment

According to EC-Regulation 2015/830

PNEC ((2-methoxymethylethoxy)propanol): 2.74 mg/kg
Exposure: Soil

PNEC ((2-methoxymethylethoxy)propanol): 4168 mg/l
Exposure: Sewage Treatment Plant

PNEC (2-(2-ethoxyethoxy)ethanol): 0.74 mg/l
Exposure: Freshwater

PNEC (2-(2-ethoxyethoxy)ethanol): 0.074 mg/l
Exposure: Marine water

PNEC (2-(2-ethoxyethoxy)ethanol): 10 mg/l
Exposure: Intermittent release

PNEC (2-(2-ethoxyethoxy)ethanol): 500 mg/l
Exposure: Sewage Treatment Plant

PNEC (2-(2-ethoxyethoxy)ethanol): 2.47 mg/kg dw
Exposure: Freshwater sediment

PNEC (2-(2-ethoxyethoxy)ethanol): 0.247mg/kg dw
Exposure: Marine water sediment

PNEC (2-(2-ethoxyethoxy)ethanol): 0.15 mg/kg dw
Exposure: Soil

PNEC (1-butylpyrrolidin-2-one): 3.57mg/kg
Exposure: Soil

PNEC (1-butylpyrrolidin-2-one): 2.96mg/kg
Exposure: Marine water sediment

PNEC (1-butylpyrrolidin-2-one): 29.6mg/kg
Exposure: Freshwater sediment

PNEC (1-butylpyrrolidin-2-one): 30,62 mg/L
Exposure: Sewage Treatment Plant

PNEC (1-butylpyrrolidin-2-one): 0,4mg/L
Exposure: Marine water

PNEC (1-butylpyrrolidin-2-one): 4mg/L
Exposure: Freshwater

8.2. Exposure controls

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

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

There is no appendix to this safety data sheet.

Exposure limits

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

Appropriate technical measures

Ensure emergency eyewash and -showers are clearly marked.

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. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment



Generally

According to EC-Regulation 2015/830

Use only CE marked protective equipment.

Respiratory Equipment

No specific requirements.

Skin protection

Dedicated work clothing should be worn.

Hand protection

Wear protective gloves. The specific work situation is unknown. Contact the suppliers of the gloves for further advice regarding the appropriate glove type. Please note that elastic gloves stretch when used. The thickness of the gloves, and therefore their penetration time, will be reduced. Moreover, the temperature of the glove in use is about 35°C, while the standard test, EN 374-3, is done at 23°C. The penetration time is therefore reduced by a factor of 3.

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Red
Odour	Characteristic
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm ³)	1.05

Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

Data on fire and explosion hazards

Flash point (°C)	No data available.
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.

Solubility

Solubility in water	Soluble
n-octanol/water coefficient	No data available.

9.2. Other information

Solubility in fat (g/L)	No data available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Nothing special

10.4. Conditions to avoid

Nothing special

10.5. Incompatible materials

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

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

According to EC-Regulation 2015/830

Substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: >2000 mg/kg

Substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 300-2000 mg/kg

Substance: dimethyl adipate
Species: Rat
Test: LD50
Route of exposure: Dermal
Result: 2000mg/kg

Substance: dimethyl adipate
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 5000mg/kg

Substance: dimethyl adipate
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: 11000mg/l

Substance: 2-(2-ethoxyethoxy)ethanol
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: 9143 mg/kg

Substance: 2-(2-ethoxyethoxy)ethanol
Species: Mouse
Test: LD50
Route of exposure: Oral
Result: 6031 mg/kg

Substance: 2-(2-ethoxyethoxy)ethanol
Species: Rat
Test: LC0
Route of exposure: Inhalation
Result: 25 mg/m³

Substance: (2-methoxymethylethoxy)propanol
Species: Rabbit
Test: LD50
Route of exposure: Dermal
Result: 9510 mg/kg

Substance: (2-methoxymethylethoxy)propanol
Species: Rat
Test: LD50
Route of exposure: Oral
Result: 5000 mg/kg

Substance: (2-methoxymethylethoxy)propanol
Species: Rat
Test: LC50
Route of exposure: Inhalation
Result: 3.35 mg/l 7h ånga

Substance: dimethyl succinate
Species: Rat
Test: LD50
Route of exposure: Dermal
Result: 2000mg/kg

Substance: dimethyl succinate

According to EC-Regulation 2015/830

Species: Rat
 Test: LD50
 Route of exposure: Oral
 Result: 5000mg/kg

Substance: dimethyl succinate
 Species: Rat
 Test: LC50
 Route of exposure: Inhalation
 Result: 11000mg/l

Substance: 1-butylpyrrolidin-2-one
 Species: Rabbit
 Test: LD50
 Route of exposure: Dermal
 Result: >2000mg/kg

Substance: 1-butylpyrrolidin-2-one
 Species: Rat
 Test: LD50
 Route of exposure: Oral
 Result: 300-2000mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
 No adverse effect observed.

Carcinogenicity

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
 No adverse effect observed.

Reproductive toxicity

Data on substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
 No adverse effect observed.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Long term effects

This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
 Species: Daphnia
 Test: EC10
 Duration: 21d
 Result: 2.6 mg/l

Substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
 Species: Daphnia
 Test: EC50
 Duration: 48h
 Result: >1-10 mg/l

Substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
 Species: Fish
 Test: LC50
 Duration: 96h
 Result: 10-100 mg/l

Substance: Poly(oxy-1,2-ethanediyl), alpha-tridecyl-omega-hydroxy-, branched
 Species: Algae
 Test: EC50
 Duration: 72h
 Result: >1-10 mg/l

According to EC-Regulation 2015/830

Substance: dimethyl adipate
Species: Daphnia
Test: EC50
Duration: 48h
Result: 112-150mg/l

Substance: dimethyl adipate
Species: Fish
Test: LC50
Duration: 96h
Result: 18-24mg/l

Substance: dimethyl adipate
Species: Algae
Test: EC50
Duration: 72h
Result: >85mg/l

Substance: 2-(2-ethoxyethoxy)ethanol
Species: Daphnia
Test: LC50
Duration: 48h
Result: 1982 mg/l

Substance: 2-(2-ethoxyethoxy)ethanol
Species: Fish
Test: LC50
Duration: 96h
Result: 6010 mg/l

Substance: 2-(2-ethoxyethoxy)ethanol
Species: Algae
Test: EC50
Duration: 96h
Result: >100 mg/l

Substance: (2-methoxymethylethoxy)propanol
Species: Daphnia
Test: NOEC
Duration: 22d
Result: 0.5 mg/l

Substance: (2-methoxymethylethoxy)propanol
Species: Daphnia
Test: EC50
Duration: 48h
Result: 1919 mg/l

Substance: (2-methoxymethylethoxy)propanol
Species: Fish
Test: LC50
Duration: 96h
Result: >1000 mg/l

Substance: (2-methoxymethylethoxy)propanol
Species: Algae
Test: EC50
Duration: 72h
Result: 969 mg/l

Substance: dimethyl succinate
Species: Daphnia
Test: EC50
Duration: 48h
Result: 112-150mg/l

Substance: dimethyl succinate
Species: Fish
Test: LC50
Duration: 96h
Result: 12-24mg/l

Substance: dimethyl succinate

According to EC-Regulation 2015/830

Species: Algae
Test: EC50
Duration: 72h
Result: >85mg/l

Substance: 1-butylpyrrolidin-2-one
Species: Daphnia
Test: EC50
Duration: 48h
Result: >100mg/l

Substance: 1-butylpyrrolidin-2-one
Species: Fish
Test: LC50
Duration: 96h
Result: >100mg/l

Substance: 1-butylpyrrolidin-2-one
Species: Algae
Test: EC50
Duration: 72h
Result: 130mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
Poly(oxy-1,2-ethanediyl), alph...	Yes	CO2 Evolution Test	>60%
dimethyl adipate	Yes	No data available	No data available
2-(2-ethoxyethoxy)ethanol	Yes	CO2 Evolution Test	79.4%
(2-methoxymethylethoxy)propano...	Yes	DOC Die-Away Test	75%
dimethyl succinate	Yes	No data available	No data available
dimethyl glutarate	Yes	No data available	No data available
1-butylpyrrolidin-2-one	Yes	No data available	No data available

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
Poly(oxy-1,2-ethanediyl), alph...	No	No data available	No data available
2-(2-ethoxyethoxy)ethanol	No	-0.54	3
(2-methoxymethylethoxy)propano...	No	0.006	No data available
1-butylpyrrolidin-2-one	No	1.265	No data available

12.4. Mobility in soil

2-(2-ethoxyethoxy)ethanol: Log Koc= -0.349226, Calculated from LogPow ().
(2-methoxymethylethoxy)propano...: Log Koc= 0.28 (High mobility potential.).
1-butylpyrrolidin-2-one: Log Koc= 1.0801535, Calculated from LogPow (High mobility potential.).

12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code

-

Specific labelling

Not applicable

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

14.1. UN number	-
14.2. UN proper shipping name	-
14.3. Transport hazard class(es)	-
14.4. Packing group	-
Notes	-

According to EC-Regulation 2015/830

Tunnel restriction code	-
IMDG	
UN-no.	-
Proper Shipping Name	-
Class	-
PG*	-
EmS	-
MP**	-
Hazardous constituent	-
IATA/CAO	
UN-no.	-
Proper Shipping Name	-
Class	-
PG*	-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant

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 cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Demands for specific education

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Additional information

Not applicable

Seveso

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Biocidal reg. no.

Not applicable

Sources

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents.

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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP).

Regulation (EC) 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H302 - Harmful if swallowed.

H315 - Causes skin irritation.

H318 - Causes serious eye damage.

H319 - Causes serious eye irritation.

The full text of identified uses as mentioned in section 1

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According to EC-Regulation 2015/830

Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

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.

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.

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

The safety data sheet is validated by

David Löwenstein

Date of last essential change

(First cipher in SDS version)

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Date of last minor change

(Last cipher in SDS version)

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