

SAFETY DATA SHEET

AGS 33+ GEL

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

1.1. Product identifier

Trade name

AGS 33+ GEL

Product no.

3641

Unique formula identifier (UFI)

YR20-J00E-W00M-SXCK

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

Relevant identified uses of the substance or mixture

Graffiti remover

Relevant identified uses of the substance or mixture (REACH)

No special

Uses advised against

No special

1.3. Details of the supplier of the safety data sheet

Company and address

Trion Tensid AB

Svederusgatan 1-3

SE-75450 Uppsala

Sweden

+46 18 15 61 90

www.trion.se

Contact person

Magnus Åkerström

E-mail

info@trion.se

SDS date

2020-11-20

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

Flam. Liq. 3; H226, Flammable liquid and vapour.

Acute Tox. 4; H302, Harmful if swallowed.

Asp. Tox. 1; H304, May be fatal if swallowed and enters airways.

Skin Irrit. 2; H315, Causes skin irritation.

Eye Irrit. 2; H319, Causes serious eye irritation.

STOT SE 3; H335, May cause respiratory irritation.

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

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram(s)



Signal word

Danger

Hazard statement(s)

Flammable liquid and vapour.

Harmful if swallowed.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

Safety statement(s)

General

-

Prevention

P264, Wash hands and exposed skin thoroughly after handling.

P280, Wear protective gloves / eye protection / protective clothing.

Response

P301+P310, IF SWALLOWED: Immediately call a POISON CENTER / doctor.

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

P331, Do NOT induce vomiting.

Storage

P403+P235, Store in a well-ventilated place. Keep cool.

Disposal

P501, Dispose of contents/container to an approved waste disposal plant.

Hazardous substances

Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin
benzyl alcohol

α^3 -butyrolactone

1-butylpyrrolidin-2-one

2.3. Other hazards

Additional labelling

EUH066, Repeated exposure may cause skin dryness or cracking.

Additional warnings

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

VOC

VOC content: 245 g/l

MAXIMUM VOC CONTENT (Phase II, category B/a1: 850 g/l)

SECTION 3: Composition/information on ingredients
3.2 Mixtures

| Product/Ingredient name | Identifiers | % w/w | Classification | Note |
|--|---|--------|--|------|
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | CAS No.: 64742-95-6 EC No.: 265-199-0 REACH No.: 01-2119455851-35-xxxx Index No.: 649-356-00-4 | 15-25% | Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411 EUH066 STOT SE 3, H335 (SCL: 20.00 %) | |
| dimethyl glutarate | CAS No.: 1119-40-0 EC No.: 214-277-2 REACH No.: 01-2119900156-49-XXXX Index No.: | 15-25% | | |
| benzyl alcohol | CAS No.: 100-51-6 EC No.: 202-859-9 REACH No.: 01-2119492630-38-xxxx Index No.: 603-057-00-5 | 15-25% | Acute Tox. 4, H302 Acute Tox. 4, H332 | |
| α^3 -butyrolactone | CAS No.: 96-48-0 EC No.: 202-509-5 REACH No.: 01-2120062728-48-XXXX Index No.: | 10-15% | Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 | |
| 1-butylpyrrolidin-2-one | CAS No.: 3470-98-2 EC No.: 222-437-8 REACH No.: 01-2120062728-48-XXXX Index No.: | 10-15% | Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 | |
| dimethyl succinate | CAS No.: 106-65-0 EC No.: 203-419-9 REACH No.: 01-2119475445-32-XXXX Index No.: | 5-10% | | |

| | | |
|------------------|----------------------------------|-------|
| dimethyl adipate | CAS No.: 627-93-0 | 5-10% |
| | EC No.: 211-020-6 | |
| | REACH No.: 01-2119475445-32-XXXX | |
| | Index No.: | |

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

Other information

No special

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

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

Eye contact

Upon irritation of the eye: 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 upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

Ingestion

In the case of ingestion, contact a doctor immediately. 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 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.

Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.

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

This product contains substances that can cause chemical pneumonia if inhaled. The symptoms of chemical pneumonia may appear after several hours.

Irritation 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.

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

Recommended: alcohol-resistant foam, carbon dioxide or powder. DO NOT USE WATER!

5.2. Special hazards arising from the substance or 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:

Nitrogen oxides (NO_x)

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

Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Avoid inhalation of vapours from spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

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

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Ground and bond container and receiving equipment.

Use explosion-proof [electrical / lighting / ventilating]equipment.

Use non-sparking tools.

Take action to prevent static discharges.

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

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.

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

Take action to prevent static discharges.

Storage temperature

Temperatur

4 - 25 Celcius

Incompatible materials

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

No substances are listed in the national list of substances with an occupational exposure limit.

DNEL

| Product/Ingredient name | DNEL | Route of exposure | Duration |
|--|-----------------------|-------------------|---|
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | 11 mg/kg/day | Oral | Long term – Systemic effects - General population |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | 11 mg/kg/day | Dermal | Long term – Systemic effects - General population |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | 32 mg/m ³ | Inhalation | Long term – Systemic effects - General population |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | 150 mg/m ³ | Inhalation | Long term – Systemic effects - Workers |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | 25 mg/kg/day | Dermal | Long term – Systemic effects - Workers |
| dimethyl glutarate | 5 mg/m ³ | Inhalation | Long term – Local effects - General population |
| dimethyl glutarate | 8,3 mg/m ³ | Inhalation | Long term – Local effects - Workers |
| benzyl alcohol | 40 mg/kg bw/day | Dermal | Short term – Systemic effects - Workers |
| benzyl alcohol | 20 mg/kg bw/day | Oral | Short term – Systemic |

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2015/830

| | | | |
|-------------------------------|------------------------|------------|--|
| | | | effects - General population |
| benzyl alcohol | 22 mg/m ³ | Inhalation | Long term – Systemic effects - Workers |
| benzyl alcohol | 8 mg/kg bw/day | Dermal | Long term – Systemic effects - Workers |
| benzyl alcohol | 110 mg/m ³ | Inhalation | Short term – Systemic effects - Workers |
| benzyl alcohol | 5,4 mg/m ³ | Inhalation | Long term – Systemic effects - General population |
| benzyl alcohol | 4 mg/kg bw/day | Dermal | Long term – Systemic effects - General population |
| benzyl alcohol | 4 mg/kg bw/day | Oral | Long term – Systemic effects - General population |
| benzyl alcohol | 27 mg/m ³ | Inhalation | Short term – Systemic effects - General population |
| benzyl alcohol | 20 mg/kg bw/day | Dermal | Short term – Systemic effects - General population |
| α ³ -butyrolactone | 2,5 mg/kg bw/day | Oral | Short term – Local effects - General population |
| α ³ -butyrolactone | 2,5 mg/kg bw/day | Oral | Long term – Systemic effects - General population |
| α ³ -butyrolactone | 5 mg/kg bw/day | Dermal | Long term – Systemic effects - General population |
| α ³ -butyrolactone | 17,4 mg/m ³ | Inhalation | Long term – Systemic effects - General population |
| α ³ -butyrolactone | 10 mg/kg bw/day | Dermal | Long term – Systemic effects - Workers |
| α ³ -butyrolactone | 70,5 mg/m ³ | Inhalation | Long term – Systemic effects - Workers |
| 1-butylpyrrolidin-2-one | 2,5 mg/kg bw/day | Oral | Short term – Systemic effects - General population |
| 1-butylpyrrolidin-2-one | 2,5 mg/kg bw/day | Oral | Long term – Systemic effects - General population |
| 1-butylpyrrolidin-2-one | 5 mg/kg bw/day | Dermal | Long term – Systemic |

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2015/830

| | | | |
|-------------------------|------------------------|------------|---|
| | | | effects - General population |
| 1-butylpyrrolidin-2-one | 17,4 mg/m ³ | Inhalation | Long term – Systemic effects - General population |
| 1-butylpyrrolidin-2-one | 10 mg/kg bw/day | Dermal | Long term – Systemic effects - Workers |
| 1-butylpyrrolidin-2-one | 70,5 mg/m ³ | Inhalation | Long term – Systemic effects - Workers |
| dimethyl succinate | 6,3 mg/kg bw/day | Dermal | Long term – Systemic effects - Workers |
| dimethyl succinate | 33,5 mg/m ³ | Inhalation | Long term – Systemic effects - Workers |
| dimethyl succinate | 1,1 mg/m ³ | Inhalation | Long term – Local effects - Workers |
| dimethyl succinate | 1,1 mg/m ³ | Inhalation | Short term – Local effects - Workers |
| dimethyl succinate | 67 mg/m ³ | Inhalation | Short term – Systemic effects - Workers |
| dimethyl succinate | 12,6 mg/kg bw/day | Dermal | Short term – Systemic effects - Workers |
| dimethyl adipate | 8,3 mg/m ³ | Inhalation | Long term – Local effects - Workers |
| dimethyl adipate | 5 mg/m ³ | Inhalation | Long term – Local effects - General population |

PNEC

| Product/Ingredient name | PNEC | Route of exposure | Duration of Exposure |
|-------------------------|---------------------|------------------------|----------------------|
| dimethyl glutarate | 0,0031 mg/L | Marine water | Single |
| dimethyl glutarate | 0,31 mg/L | Water | No data available |
| dimethyl glutarate | 0,031 mg/L | Freshwater | Single |
| dimethyl glutarate | 0,15 mg/kg | Freshwater sediment | No data available |
| dimethyl glutarate | 0,015 mg/kg | Marine water sediment | No data available |
| dimethyl glutarate | 10 mg/L | Sewage treatment plant | No data available |
| dimethyl glutarate | 0,113 mg/kg soil dw | Soil | No data available |
| benzyl alcohol | 2,3 mg/L | Water | Continuous |
| benzyl alcohol | 0,1 mg/L | Marine water | Single |
| benzyl alcohol | 39 mg/L | Sewage treatment plant | Single |
| benzyl alcohol | 5,27 mg/kg | Freshwater sediment | Single |
| benzyl alcohol | 1 mg/L | Freshwater | Single |

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2015/830

| | | | |
|---------------------------|----------------------------|------------------------|-------------------|
| benzyl alcohol | 0,456 mg/kg | Soil | Single |
| benzyl alcohol | 0,527 mg/kg | Marine water sediment | No data available |
| α^3 -butyrolactone | 0,7955 mg/kg soil dw | Soil | No data available |
| α^3 -butyrolactone | 0,6336 mg/kg sediment dw | Marine water sediment | No data available |
| α^3 -butyrolactone | 6,336 mg/kg sediment dw | Freshwater sediment | No data available |
| α^3 -butyrolactone | 30,62 mg/L | Sewage treatment plant | No data available |
| α^3 -butyrolactone | 1 mg/L | Water | No data available |
| α^3 -butyrolactone | 0,08 mg/L | Marine water | No data available |
| α^3 -butyrolactone | 0,8 mg/L | Freshwater | No data available |
| 1-butylpyrrolidin-2-one | 0,7955 mg/kg | Soil | Single |
| 1-butylpyrrolidin-2-one | 06336 mg/kg | Marine water sediment | Single |
| 1-butylpyrrolidin-2-one | 6,336 mg/kg | Freshwater sediment | Single |
| 1-butylpyrrolidin-2-one | 30,62 mg/L | Sewage treatment plant | Continuous |
| 1-butylpyrrolidin-2-one | 1 mg/L | Water | Single |
| 1-butylpyrrolidin-2-one | 0,08 mg/L | Marine water | Single |
| 1-butylpyrrolidin-2-one | 0,8 mg/L | Freshwater | Single |
| dimethyl succinate | 5 μ g/L | Marine water | No data available |
| dimethyl succinate | 50 μ g/L | Freshwater | No data available |
| dimethyl succinate | 137 μ g/kg sediment dw | Freshwater sediment | No data available |
| dimethyl succinate | 10000 μ g/L | Sewage treatment plant | No data available |
| dimethyl succinate | 137 μ g/kg soil dw | Soil | No data available |
| dimethyl succinate | 500 μ g/L | Water | Continuous |
| dimethyl succinate | 14 μ g/kg sediment dw | Marine water sediment | No data available |
| dimethyl adipate | 0,018 mg/L | Freshwater | No data available |
| dimethyl adipate | 10 mg/L | Sewage treatment plant | No data available |
| dimethyl adipate | 0,16 mg/kg sediment dw | Freshwater sediment | No data available |
| dimethyl adipate | 0,18 mg/L | Water | Continuous |
| dimethyl adipate | 0,016 mg/kg sediment dw | Marine water sediment | No data available |
| dimethyl adipate | 0,09 mg/kg soil dw | Soil | No data available |
| dimethyl adipate | 0,0018 mg/L | Marine water | No data available |

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Smoking, eating and drinking are not allowed in the work premises

Exposure scenarios

There are no exposure scenarios implemented for this product.

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2015/830

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

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

Keep damming materials near the workplace. If possible, collect spillage during work.

Individual protection measures, such as personal protective equipment

Generally


Use only CE marked protective equipment.

Respiratory Equipment

| Work situation | Type | Class | Colour | Standards |
|----------------|---|-------|--------|-----------|
| - | Respiratory protection is not needed in the event of adequate ventilation | - | - | - |


Skin protection

| Work situation | Recommended | Type/Category | Standards |
|----------------|---|---------------|-----------|
| | Dedicated work clothing should be worn. | - | - |




Hand protection

| Work situation | Material | Glove thickness (mm) | Breakthrough time (min.) | Standards |
|----------------|----------|----------------------|--------------------------|-----------|
| | Nitrile | 0,4 | >480 | EN374-2 |



Eye protection

| Work situation | Type | Standards |
|----------------|--|-----------|
| | Wear safety glasses with side shields. | EN166 |



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form

Liquid

Colour

Yellowish

Odour

Solvent

Odour threshold (ppm)

Testing not relevant or not possible due to nature of the product.

pH

Testing not relevant or not possible due to nature of the product.

Density (g/cm³)

1.02

Viscosity

Testing not relevant or not possible due to nature of the product.

Phase changes

Melting point (°C)

Testing not relevant or not possible due to nature of the product.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

Evaporation rate (n-butylacetate = 100)

Testing not relevant or not possible due to nature of the product.

Data on fire and explosion hazards

Flash point (°C)

59.00 °C

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Explosion limits (% v/v)

Testing not relevant or not possible due to nature of the product.

Explosive properties

Testing not relevant or not possible due to nature of the product.

Oxidizing properties

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Insoluble

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

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

No special

10.4. Conditions to avoid

Avoid static electricity.

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

| Product/Ingredient name | Species | Test | Route of exposure | Result |
|--|---------|----------------|-------------------|---------------------------|
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | Rat | LD50 | Oral | 3492 mg/kgbw |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | Rabbit | LD50 | Dermal | >3160 mg/kgbw |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | Rat | LC50 | Inhalation | >6193 mg/m ³ |
| dimethyl glutarate | Rat | LD50 | Dermal | >2000 mg/kgbw |
| dimethyl glutarate | Rat | LC50 | Inhalation | >11 (4h) mg/l |
| dimethyl glutarate | Rat | LD50 | Oral | >5000 mg/kgbw |
| benzyl alcohol | Rat | LD50 | Oral | 1230 mg/kg · |
| benzyl alcohol | Rabbit | LD50 | Dermal | 2000 mg/kg · |
| benzyl alcohol | Rat | LC50 | Inhalation | >4178 mg/m ³ · |
| α ³ -butyrolactone | Rat | LD50 | Oral | 300-2000 mg/kg |
| α ³ -butyrolactone | Rabbit | LD50 | Dermal | >2000 mg/kg |
| 1-butylpyrrolidin-2-one | Rat | LD50 | Oral | 300-2000 mg/kg · |
| 1-butylpyrrolidin-2-one | Rabbit | LD50 | Dermal | >2000 mg/kg · |
| dimethyl succinate | Rat | LD50 | Oral | 6892 mg/kgbw |
| dimethyl succinate | Rat | LD50 | Dermal | >2000 mg/kgbw |
| dimethyl adipate | Rat | LD50 | Oral | >5000 mg/kgbw |
| dimethyl adipate | Rat | LD50 | Dermal | >2000 mg/kgbw |
| dimethyl adipate | Rat | LC50 (4 hours) | Inhalation | >11 mg/l |

Harmful if swallowed.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory sensitisation

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

Skin sensitisation

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

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 respiratory irritation.

May cause drowsiness or dizziness.

STOT-repeated exposure

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

Aspiration hazard

May be fatal if swallowed and enters airways.

Long term effects

Irritation 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.

Other information

α^3 -butyrolactone has been classified by IARC as a group 3 carcinogen.

SECTION 12: Ecological information

12.1. Toxicity

| Product/Ingredient name | Species | Test | Duration | Result |
|--|------------|------|----------|--------------|
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | Fish | LT50 | 96 hours | 9,2 mg/l |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | Algae | EC50 | 72 hours | 2,6 mg/l |
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | Crustacean | EC50 | 48 hours | 3,2 mg/l |
| dimethyl glutarate | Fish | LC50 | 96 hours | 18-24 ppmV |
| dimethyl glutarate | Daphnia | EC50 | 48 hours | 112-150 ppmV |
| benzyl alcohol | Fish | LC50 | 48 hours | 646 mg/L · |
| benzyl alcohol | Algae | LOEC | 96 hours | 640 mg/L · |
| benzyl alcohol | Daphnia | EC50 | 48 hours | 230 mg/L · |
| α^3 -butyrolactone | Fish | LC50 | 96 hours | >100 mg/l |
| α^3 -butyrolactone | Daphnia | EC50 | 48 hours | > 100 mg/l |
| α^3 -butyrolactone | Algae | EC50 | 72 hours | 130 mg/l |

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2015/830

| | | | | |
|-------------------------|---------|------|----------|--------------|
| 1-butylpyrrolidin-2-one | Fish | LC50 | 96 hours | >100 mg/L · |
| 1-butylpyrrolidin-2-one | Algae | EC50 | 72 hours | 130 mg/L · |
| 1-butylpyrrolidin-2-one | Daphnia | EC50 | 48 hours | >100 mg/L · |
| dimethyl succinate | Fish | LC50 | 96 hours | 50-100 mg/l |
| dimethyl succinate | Algae | EC50 | 72 hours | >100 mg/l |
| dimethyl succinate | Daphnia | EC50 | 48 hours | >100 mg/l |
| dimethyl adipate | Fish | LC50 | 96 hours | 18-24 ppmV |
| dimethyl adipate | Algae | EC50 | 72 hours | >100 mg/l |
| dimethyl adipate | Daphnia | EC50 | 48 hours | 112-150 ppmV |

12.2. Persistence and degradability

| Product/Ingredient name | Biodegradability | Test | Result |
|--|------------------|------------|--------|
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | Yes | | |
| dimethyl glutarate | Yes | OECD 301 D | 70% |
| benzyl alcohol | Yes | OECD 301 D | >90% |
| α ³ -butyrolactone | Yes | | |
| 1-butylpyrrolidin-2-one | Yes | | |
| dimethyl succinate | Yes | OECD 301 B | 74,1 % |
| dimethyl adipate | Yes | OECD 301 A | 100% |

12.3. Bioaccumulative potential

| Product/Ingredient name | Potential bioaccumulation | LogPow | BCF |
|--|---------------------------|-------------------|-------------------|
| Solvent naphtha (petroleum), light arom. Low boiling point naphtha - unspecified [A complex combin | No | No data available | No data available |
| dimethyl glutarate | No | No data available | No data available |
| benzyl alcohol | No | No data available | No data available |
| α ³ -butyrolactone | No | 0,1000 | No data available |
| 1-butylpyrrolidin-2-one | No | No data available | No data available |
| dimethyl succinate | No | No data available | No data available |
| dimethyl adipate | No | No data available | No data available |

12.4. Mobility in soil

No data available

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

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

After dilution with water, small quantities are permitted to go to water treatment plants. Empty packages and product residues must be handled in an environmentally correct manner according to applicable laws and provisions. The company is affiliated to REPA. Do not attempt to refill or clean the package.

EWC code

20 01 13* Solvents

Specific labelling

Not applicable

Contaminated packing

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

The Waste Regulations 2011 No. 988

H4 Irritant: substances and preparations that are not corrosive, but that can cause inflammation in the event of direct, prolonged or repeated contact with the skin or mucous membranes.

SECTION 14: Transport information

14.1 - 14.4

This product is within scope of the regulations of transport of dangerous goods.

ADR/RID

| UN- or ID number | UN proper shipping name | Transport hazard class | PG | Tunnel restriction code |
|------------------|------------------------------|------------------------|-----|-------------------------|
| 3295 | HYDROCARBONS, LIQUID, N.O.S. | 3 | III | 3 (D/E) |

IMDG

| UN- or ID number | UN proper shipping name | Transport hazard class | PG | EmS |
|------------------|------------------------------|------------------------|-----|----------|
| 3295 | HYDROCARBONS, LIQUID, N.O.S. | 3 | III | F-E, S-D |

IATA

| UN- or ID number | UN proper shipping name | Transport hazard class | PG |
|------------------|------------------------------|------------------------|-----|
| 3295 | HYDROCARBONS, LIQUID, N.O.S. | 3 | III |

"MARINE POLLUTANT"

No

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

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

No data available

SECTION 15: Regulatory information

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

Restrictions for application

Restricted to professional users.

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

Additional information

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.

The Control of Major Accident Hazards (COMAH) Regulations 2015.

Directive 2004/42/CE of the European Parliament and of the Council of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products and amending Directive 1999/13/EC.

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

H226, Flammable liquid and vapour.

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.

EUH066, Repeated exposure may cause skin dryness or cracking.

H335, May cause respiratory irritation.

H302, Harmful if swallowed.

H332, Harmful if inhaled.

H319, Causes serious eye irritation.

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

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
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
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
UVCB = Complex hydrocarbon substance
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative

Additional information

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

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

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

The safety data sheet is validated by

MÅ

Other

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