



SAFETY DATA SHEET FR3 VINYL & QUARRY

According to Regulation (EC) No 1907/2006, Annex II, as amended.

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

1.1. Product identifier

Product name FR3 VINYL & QUARRY

Internal identification C545

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

Identified uses Cleaning agent.

Uses advised against Use only for intended applications.

1.3. Details of the supplier of the safety data sheet

Supplier ARROW SOLUTIONS
RAWDON ROAD
MOIRA
SWADLINCOTE
DERBYSHIRE
DE12 6DA
TEL: +44 (0)1283 221044
FAX: +44 (0)1283 225731
sales@arrowchem.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 777 8505 330 (24 hrs).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Dam. 1 - H318

Environmental hazards Not Classified

2.2. Label elements

Pictogram



Signal word Danger

Hazard statements H315 Causes skin irritation.
H318 Causes serious eye damage.
EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction.

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| | |
|---------------------------------|---|
| Precautionary statements | <p>P280 Wear protective gloves, eye and face protection.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER/ doctor.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p> |
| Contains | SODIUM DODECYL BENZENE SULPHONATE |
| Detergent labelling | 5 - < 15% anionic surfactants, < 5% aliphatic hydrocarbons, < 5% phosphates, Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 |

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | | |
|--|----------------------|--|
| PINE OIL | | 10-30% |
| CAS number: 8002-09-3 | EC number: 304-455-9 | |
| Classification | | |
| Skin Irrit. 2 - H315 | | |
| SODIUM DODECYL BENZENE SULPHONATE | | 5-10% |
| CAS number: 85117-50-6 | EC number: 285-600-2 | |
| Classification | | |
| Acute Tox. 4 - H302 | | |
| Skin Irrit. 2 - H315 | | |
| Eye Dam. 1 - H318 | | |
| DISTILLED TALL OIL | | 1-5% |
| CAS number: 8002-26-4 | EC number: 232-304-6 | REACH registration number: 01-2119490104-45-XXXX |
| Classification | | |
| Not Classified | | |
| (2-methoxymethylethoxy)propanol | | 1-5% |
| CAS number: 34590-94-8 | EC number: 252-104-2 | REACH registration number: 01-2119450011-60-XXXX |
| Classification | | |
| Not Classified | | |
| 3-BUTOXYPROPAN-2-OL | | <1% |
| CAS number: 5131-66-8 | EC number: 225-878-4 | |
| Classification | | |
| Skin Irrit. 2 - H315 | | |
| Eye Irrit. 2 - H319 | | |

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| | | |
|--|-----------------------|--|
| TETRA POTASSIUM PYROPHOSPHATE <1% | | |
| CAS number: 7320-34-5 | EC number: 230-785-7 | REACH registration number: 01-2119489369-18-XXXX |
| Classification Eye Irrit. 2 - H319 | | |
| 2-AMINOETHANOL <1% | | |
| CAS number: 141-43-5 | EC number: 205-483-3 | REACH registration number: 01-2119486455-28 |
| Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 STOT SE 3 - H335 Aquatic Chronic 3 - H412 | | |
| tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate <1% | | |
| CAS number: 51981-21-6 | EC number: 257-573-7 | REACH registration number: 01-2119493601-38-XXXX |
| Classification Not Classified | | |
| METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6 <1% | | |
| CAS number: 55965-84-9 | M factor (Acute) = 10 | M factor (Chronic) = 10 |
| Classification Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410 | | |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Show this Safety Data Sheet to the medical personnel. If medical advice is needed, have product container or label at hand. Get medical attention immediately.

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| | |
|---------------------|--|
| Inhalation | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. |
| Ingestion | Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention immediately. |
| Skin contact | Rinse with water. Get medical attention if irritation persists after washing. |
| Eye contact | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse. Get medical attention immediately. |

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

| | |
|---------------------|--|
| Inhalation | Coughing, chest tightness, feeling of chest pressure. |
| Ingestion | Gastrointestinal symptoms, including upset stomach. |
| Skin contact | Causes skin irritation. May cause skin sensitisation or allergic reactions in sensitive individuals. |
| Eye contact | Causes serious eye damage. |

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

| | |
|-----------------------------|------------------------|
| Notes for the doctor | Treat symptomatically. |
|-----------------------------|------------------------|

SECTION 5: Firefighting measures

5.1. Extinguishing media

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|-------------------------------------|---|
| Suitable extinguishing media | Use fire-extinguishing media suitable for the surrounding fire. |
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5.2. Special hazards arising from the substance or mixture

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|--------------------------------------|---|
| Hazardous combustion products | Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrous gases (NO _x). Phosphorus. Sulphurous gases (SO _x). |
|--------------------------------------|---|

5.3. Advice for firefighters

| | |
|---|---|
| Protective actions during firefighting | No specific firefighting precautions known. |
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| | |
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| Personal precautions | Wear protective gloves, eye and face protection. Avoid contact with skin, eyes and clothing. Do not touch or walk into spilled material. Take care as floors and other surfaces may become slippery. Avoid contact with contaminated tools and objects. Do not handle broken packages without protective equipment. Wash thoroughly after dealing with a spillage. |
|-----------------------------|--|

6.2. Environmental precautions

| | |
|----------------------------------|--|
| Environmental precautions | Do not discharge into drains or watercourses or onto the ground. |
|----------------------------------|--|

6.3. Methods and material for containment and cleaning up

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|--------------------------------|--|
| Methods for cleaning up | Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Absorb spillage with inert, damp, non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. |
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6.4. Reference to other sections

| | |
|------------------------------------|---|
| Reference to other sections | Wear protective clothing as described in Section 8 of this safety data sheet. |
|------------------------------------|---|

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear protective gloves, eye and face protection. Avoid contact with skin, eyes and clothing. Avoid contact with contaminated tools and objects. Do not reuse empty containers. Do not empty into drains. Do not eat, drink or smoke when using this product. Do not handle broken packages without protective equipment. Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store at temperatures between 4°C and 40°C.

Storage class Miscellaneous hazardous material storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

(2-methoxymethylethoxy)propanol

Long-term exposure limit (8-hour TWA): WEL 50 ppm
Sk

2-AMINOETHANOL

Long-term exposure limit (8-hour TWA): WEL 1 ppm(Sk) 2.5 mg/m³(Sk)
Short-term exposure limit (15-minute): WEL 3 ppm(Sk) 7.6 mg/m³(Sk)
Sk

WEL = Workplace Exposure Limit
Sk = Can be absorbed through skin.

DISTILLED TALL OIL (CAS: 8002-26-4)

DNEL Workers - Inhalation; Long term systemic effects: 35.3 mg/m³
Workers - Inhalation; Short term systemic effects: 35.3 mg/m³
Workers - Dermal; Long term systemic effects: 10 mg/kg/day
Workers - Dermal; Short term systemic effects: 10 mg/kg/day
General population - Inhalation; Long term systemic effects: 8.7 mg/m³
General population - Inhalation; Short term systemic effects: 8.7 mg/m³
General population - Dermal; Long term systemic effects: 5 mg/kg/day
General population - Dermal; Short term systemic effects: 5 mg/kg/day

(2-methoxymethylethoxy)propanol (CAS: 34590-94-8)

DNEL Industry - Dermal; Long term : 65 mg/kg/day
Industry - Inhalation; Long term : 310 mg/m³
Consumer - Inhalation; Long term : 37.2 mg/m³
Consumer - Dermal; Long term : 15 mg/kg/day
Consumer - Oral; Long term : 1.67 mg/kg/day

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- PNEC**
- Fresh water; 19 mg/l
 - Marine water; 1.9 mg/l
 - Intermittent release; 19 mg/l
 - STP; 4168 mg/l
 - Sediment (Freshwater); 70.2 mg/kg
 - Sediment (Marinewater); 7.02 mg/kg
 - Soil; 2.74 mg/kg

3-BUTOXYPROPAN-2-OL (CAS: 5131-66-8)

- DNEL**
- Workers - Dermal; Long term systemic effects: 52 mg/kg/day
 - Workers - Inhalation; Long term systemic effects: 147 mg/m³
 - Consumer - Inhalation; Long term systemic effects: 43 mg/m³
 - Consumer - Dermal; Long term systemic effects: 22 mg/kg/day
 - General population - Oral; Long term systemic effects: 12.5 mg/kg/day

- PNEC**
- Fresh water; 0.525 mg/l
 - Marine water; 0.0525 mg/l
 - Intermittent release; 5.25 mg/l
 - STP; 10 mg/l
 - Sediment (Freshwater); 2.36 mg/kg
 - Sediment (Marinewater); 0.236 mg/kg
 - Soil; 0.16 mg/kg

TETRA POTASSIUM PYROPHOSPHATE (CAS: 7320-34-5)

- DNEL**
- Industry - Inhalation; Long term systemic effects: 2.79 mg/m³
 - Consumer - Inhalation; Long term systemic effects: 0.68 mg/m³

- PNEC**
- Fresh water; 0.05 mg/l
 - Marine water; 0.005 mg/l

2-AMINOETHANOL (CAS: 141-43-5)

- DNEL**
- Industry - Dermal; Long term systemic effects: 1 mg/kg/day
 - Industry - Inhalation; Long term systemic effects: 3.3 mg/kg/day
 - Industry - Inhalation; Long term local effects: 3.3 mg/kg/day
 - Consumer - Dermal; Long term systemic effects: 0.24 mg/kg/day
 - Consumer - Inhalation; Long term systemic effects: 2 mg/kg/day
 - Consumer - Inhalation; Long term local effects: 2 mg/kg/day
 - Consumer - Oral; Long term systemic effects: 3.75 mg/kg/day

- PNEC**
- Fresh water; 0.085 mg/l
 - Marine water; 0.0085 mg/l
 - Intermittent release; 0.028 mg/l
 - Sediment (Freshwater); 0.434 mg/kg
 - Sediment (Marinewater); 0.0434 mg/kg
 - Soil; 0.0367 mg/kg
 - STP; 100 mg/l

tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate (CAS: 51981-21-6)

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DNEL

Workers - Inhalation; Long term systemic effects: 7.3 mg/m³

Workers - Dermal; Long term systemic effects: 15,000 mg/kg/day

General population - Inhalation; Long term systemic effects: 1.8 mg/m³

General population - Dermal; Long term systemic effects: 7,500 mg/kg/day

General population - Oral; Long term systemic effects: 1.5 mg/kg/day

8.2. Exposure controls

Protective equipment



Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with European Standard EN166. The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 4 hours. The breakthrough time for any glove material may be different for different glove manufacturers. When used with mixtures, the protection time of gloves cannot be accurately estimated. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Protective gloves should have a minimum thickness of 0.15 mm. Glove thickness is not necessarily a good measure of glove resistance as the permeation rate will depend on the exact glove composition. Specific work environments and material handling practices may vary, therefore safety procedures should be developed for each intended application. Repeated exposure to chemicals will degrade the ability of the glove to provide resistance to chemicals. The choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. Neoprene. Rubber (natural, latex).

Other skin and body protection

Provide eyewash station.

Hygiene measures

Wash contaminated clothing before reuse. Wash hands after handling.

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SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

| | |
|------------------|---------------------------------|
| Appearance | Coloured gel. |
| Colour | Brown. |
| Odour | Pine. |
| pH | pH (concentrated solution): 9.6 |
| Relative density | 1.01 @ 25°C |

9.2. Other information

| | |
|-------------------|-----------------|
| Other information | Not determined. |
|-------------------|-----------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

| | |
|------------|---|
| Reactivity | There are no known reactivity hazards associated with this product. |
|------------|---|

10.2. Chemical stability

| | |
|-----------|---|
| Stability | Stable at normal ambient temperatures and when used as recommended. |
|-----------|---|

10.3. Possibility of hazardous reactions

| | |
|------------------------------------|-----------------|
| Possibility of hazardous reactions | Not determined. |
|------------------------------------|-----------------|

10.4. Conditions to avoid

| | |
|---------------------|---|
| Conditions to avoid | There are no known conditions that are likely to result in a hazardous situation. |
|---------------------|---|

10.5. Incompatible materials

| | |
|--------------------|--|
| Materials to avoid | No specific material or group of materials is likely to react with the product to produce a hazardous situation. |
|--------------------|--|

10.6. Hazardous decomposition products

| | |
|----------------------------------|---|
| Hazardous decomposition products | Thermal decomposition or combustion products may include the following substances: Ammonia or amines. Carbon monoxide (CO). Carbon dioxide (CO ₂). Nitrous gases (NO _x). Phosphorus. Sulphurous gases (SO _x). |
|----------------------------------|---|

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

| | |
|------------------|----------|
| ATE oral (mg/kg) | 7,601.81 |
|------------------|----------|

| | |
|------------|---|
| Inhalation | Coughing, chest tightness, feeling of chest pressure. |
|------------|---|

| | |
|-----------|---|
| Ingestion | Gastrointestinal symptoms, including upset stomach. |
|-----------|---|

| | |
|--------------|--|
| Skin contact | Causes skin irritation. May cause skin sensitisation or allergic reactions in sensitive individuals. |
|--------------|--|

| | |
|-------------|----------------------------|
| Eye contact | Causes serious eye damage. |
|-------------|----------------------------|

Toxicological information on ingredients.

PINE OIL

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Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,200.0

Species Rat

Notes (oral LD₅₀) RTECS.

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,000.0

Species Rabbit

Notes (dermal LD₅₀) RTECS.

Skin corrosion/irritation

Animal data Dose: 500mg, 24 hr, Rabbit Erythema/eschar score: Severe erythema (beef redness) to eschar formation preventing grading of erythema (4). RTECS.

SODIUM DODECYL BENZENE SULPHONATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 650.0

Species Rat

ATE oral (mg/kg) 650.0

(2-methoxymethylethoxy)propanol

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 5,382.66

Species Rat

ATE oral (mg/kg) 5,382.66

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 5,001.0

Species Rabbit

ATE dermal (mg/kg) 5,001.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 3,080.0

Species Rat

ATE inhalation (vapours mg/l) 3,080.0

3-BUTOXYPROPAN-2-OL

Acute toxicity - oral

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Acute toxicity oral (LD₅₀ mg/kg) 2,000.1

Species Rat

ATE oral (mg/kg) 2,000.1

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.1

Species Rat

ATE dermal (mg/kg) 2,000.1

TETRA POTASSIUM PYROPHOSPHATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,001.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 7,940.0

Species Rabbit

Reproductive toxicity

Reproductive toxicity - development Embryotoxicity: - NOAEL: > 128 mg/kg, Oral, Rabbit

Specific target organ toxicity - repeated exposure

STOT - repeated exposure NOAEL < 10000 mg/kg, Oral, Rat

2-AMINOETHANOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 1,720.0

Species Rat

ATE oral (mg/kg) 1,720.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 1,025.0

Species Rabbit

ATE dermal (mg/kg) 1,025.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 11.0

Species Rat

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ATE inhalation (vapours mg/l) 11.0

tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 2,001.0

Species Rat

ATE oral (mg/kg) 2,001.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.1

Species Rat

ATE dermal (mg/kg) 2,000.1

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 53.0

Species Rat

Notes (oral LD₅₀) Estimated value.

ATE oral (mg/kg) 53.0

Acute toxicity - dermal

ATE dermal (mg/kg) 300.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 3.0

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Sensitising.

SECTION 12: Ecological Information

Ecotoxicity Not regarded as dangerous for the environment.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish Not determined.

Ecological information on ingredients.

(2-methoxymethylethoxy)propanol

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: > 1000 mg/l, Poecilia reticulata (Guppy)

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| | |
|---|---|
| Acute toxicity - aquatic invertebrates | NOEC, >: > 0.5 mg/l, Daphnia magna EC ₅₀ , 48 hours: 1919 mg/l, Daphnia magna |
| Acute toxicity - aquatic plants | EC ₅₀ , 96 hours: > 969 mg/l, Selenastrum capricornutum |

TETRA POTASSIUM PYROPHOSPHATE

| | |
|---|--|
| <u>Acute aquatic toxicity</u> | |
| Acute toxicity - fish | LC ₅₀ , 96 hours: > 100 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: 100 mg/l, Daphnia magna |
| Acute toxicity - aquatic plants | IC ₅₀ , 72 hours: 100 mg/l, Freshwater algae |

2-AMINOETHANOL

| | |
|---|--|
| <u>Acute aquatic toxicity</u> | |
| Acute toxicity - fish | LC ₅₀ , 96 hours: 349 mg/l, Cyprinus carpio (Common carp) LC ₅₀ , 96 hours: 170 mg/l, Carassius auratus (Goldfish) LC ₅₀ , 96 hours: 227 mg/l, Pimephales promelas (Fat-head Minnow) LC ₅₀ , 96 hours: 3684 mg/l, Brachydanio rerio (Zebra Fish) LC ₅₀ , 96 hours: >300 mg/l, Lepomis macrochirus (Bluegill) LC ₅₀ , 96 hours: >114 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: 65 mg/l, Daphnia magna |
| Acute toxicity - aquatic plants | EC ₅₀ , 72 hours: 2.5 mg/l, Selenastrum capricornutum EC ₅₀ , 72 hours: 22 mg/l, Scenedesmus subspicatus EC ₅₀ , 72 hours: 2.8 mg/l, Pseudokirchneriella subcapitata |
| Acute toxicity - microorganisms | EC ₂₀ , 30 minutes: > 1000 mg/l, Activated sludge EC ₅₀ , 3 hours <: 1000 mg/l, Activated sludge |

Chronic aquatic toxicity

| | |
|---|---|
| Chronic toxicity - aquatic invertebrates | NOEC, 21 days: 0.85 mg/l, Daphnia magna |
|---|---|

tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate

| | |
|---|--|
| <u>Acute aquatic toxicity</u> | |
| Acute toxicity - fish | LC ₅₀ , 96 hours: > 100 mg/l, Oncorhynchus mykiss (Rainbow trout) |
| Acute toxicity - aquatic invertebrates | EC ₅₀ , 48 hours: > 100 mg/l, Daphnia magna |

METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6

| | |
|--------------------------------------|--|
| <u>Acute aquatic toxicity</u> | |
| LE(C)₅₀ | 0.01 < L(E)C ₅₀ ≤ 0.1 |
| M factor (Acute) | 10 |
| Acute toxicity - fish | Estimated value. LC ₅₀ , 96 hours: 13 mg/l, Fish |

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Chronic aquatic toxicity

| | |
|---------------------------|------------------------|
| NOEC | 0.001 < NOEC ≤ 0.01 |
| Degradability | Non-rapidly degradable |
| M factor (Chronic) | 10 |

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

12.4. Mobility in soil

Mobility The product is soluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

Special Provisions note

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

| | |
|-----------------------------|--|
| National regulations | Control of Substances Hazardous to Health Regulations 2002 (as amended). |
| EU legislation | Regulation (EC) No 648/2004 of the European Parliament and of the Council of 31 March 2004 on detergents (as amended). 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 (as amended). Commission Regulation (EU) No 453/2010 of 20 May 2010. Commission Regulation (EU) No 2015/830 of 28 May 2015. |
| Guidance | Workplace Exposure Limits EH40. |

15.2. Chemical safety assessment

SECTION 16: Other information

| | |
|---|--|
| Abbreviations and acronyms used in the safety data sheet | ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service. DNEL: Derived No Effect Level. EC ₅₀ : 50% of maximal Effective Concentration. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods. LC ₅₀ : Lethal Concentration to 50 % of a test population. LD ₅₀ : Lethal Dose to 50% of a test population (Median Lethal Dose). NOAEL: No Observed Adverse Effect Level. NOEC: No Observed Effect Concentration. PBT: Persistent, Bioaccumulative and Toxic substance. PNEC: Predicted No Effect Concentration. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. UN: United Nations. vPvB: Very Persistent and Very Bioaccumulative. |
| Classification abbreviations and acronyms | Acute Tox. = Acute toxicity Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic) Eye Dam. = Serious eye damage Eye Irrit. = Eye irritation Skin Corr. = Skin corrosion Skin Irrit. = Skin irritation Skin Sens. = Skin sensitisation STOT SE = Specific target organ toxicity-single exposure |
| Revision comments | NOTE: Lines within the margin indicate significant changes from the previous revision. |
| Revision date | 03/01/2019 |
| Revision | 4.0 |
| Supersedes date | 23/11/2017 |

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|----------------------------------|--|
| SDS number | 15489 |
| Hazard statements in full | H301 Toxic if swallowed. H302 Harmful if swallowed. H311 Toxic in contact with skin. H312 Harmful in contact with skin. 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. H335 May cause respiratory irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects. EUH208 Contains METHYL-2H or METHYL-4 (3:1) Mixture of EC NO 220-239-6. May produce an allergic reaction. |

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.