



SAFETY DATA SHEET

18024 BROWN

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

1.1. Product identifier

Product name	18024 BROWN
Product number	61518
REACH registration notes	This product is not classified as hazardous, the information in this datasheet is given for guidance only.

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

Identified uses	Colourant
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Solutions UK Ltd Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 +44 1274 267306 SDS.EMEA@univarsolutions.com
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1.4. Emergency telephone number

Emergency telephone	SGS - +32 (0)3 575 55 55 (24h)
Sds No.	61518

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Not Classified

2.2. Label elements

Hazard statements	NC Not Classified
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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

18024 BROWN

YELLOW IRON OXIDE		30-60%
CAS number: 51274-00-1	EC number: 257-098-5	REACH registration number: 01-2119457554-33-XXXX

Classification
Not Classified

RED IRON OXIDE		10-30%
CAS number: 1309-37-1	EC number: 215-168-2	REACH registration number: 01-2119457614-35-XXXX

Classification
Not Classified

HYDRATED MAGNESIUM SILICATE		10-30%
CAS number: 14807-96-6	EC number: 238-877-9	

Classification
Not Classified

TRIIRON TETRAOXIDE		5-10%
CAS number: 1317-61-9	EC number: 215-277-5	REACH registration number: 01-2119457646-28-XXXX

Classification
Not Classified

CHLORITE		1-5%
CAS number: 1318-59-8	EC number: 215-285-9	

Classification
Not Classified

DOLOMITE		1-5%
CAS number: 16389-88-1	EC number: 240-440-2	

Classification
Not Classified

MAGNESIUM CARBONATE		<1%
CAS number: 546-93-0	EC number: 208-915-9	

Classification
Not Classified

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QUARTZ	<1%
CAS number: 14808-60-7	EC number: 238-878-4
Classification	
Not Classified	

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures**4.1. Description of first aid measures**

Inhalation	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse nose and mouth with water. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention if any discomfort continues.
Skin contact	Remove affected person from source of contamination. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

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

Eye contact	Solid particles trapped behind the eyelid may cause abrasive damage.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media	The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards	When heated and in case of fire, toxic vapours/gases may be formed.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

5.3. Advice for firefighters

Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions	Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of dust and contact with skin and eyes.
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6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of dust and contact with skin and eyes. Avoid spilling.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

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

YELLOW IRON OXIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ fume

Short-term exposure limit (15-minute): WEL 10 mg/m³ fume
as Fe

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

RED IRON OXIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ fume

Short-term exposure limit (15-minute): WEL 10 mg/m³ fume
as Fe

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

HYDRATED MAGNESIUM SILICATE

Long-term exposure limit (8-hour TWA): WEL 1 mg/m³ respirable dust

TRIIRON TETRAOXIDE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 5 mg/m³ fume

Short-term exposure limit (15-minute): WEL 10 mg/m³ fume
as Fe

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

CHLORITE

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Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ resp.dust

Short-term exposure limit (15-minute): WEL 10 mg/m³ total dust

MAGNESIUM CARBONATE

Long-term exposure limit (8-hour TWA): WEL 4 mg/m³ respirable dust

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust

QUARTZ

Long-term exposure limit (8-hour TWA): WEL 0,1 mg/m³

WEL = Workplace Exposure Limit.

Ingredient comments

Observe any occupational exposure limits for the product or ingredients.

YELLOW IRON OXIDE (CAS: 51274-00-1)

DNEL

Workers - Inhalation; Long term local effects: 10 mg/m³

RED IRON OXIDE (CAS: 1309-37-1)

Ingredient comments

WEL = Workplace Exposure Limits

DNEL

Workers - Inhalation; Long term local effects: 10 mg/m³

TRIIRON TETRAOXIDE (CAS: 1317-61-9)

DNEL

Workers - Inhalation; Long term local effects: 10 mg/m³

DOLOMITE (CAS: 16389-88-1)

Ingredient comments

No exposure limits known for ingredient(s).

MAGNESIUM CARBONATE (CAS: 546-93-0)

DNEL

Consumer - Oral; Long term systemic effects: 7.23 mg/kg/day
Consumer - Oral; Short term systemic effects: 7.23 mg/kg/day

QUARTZ (CAS: 14808-60-7)

DNEL

Industry - Inhalation; Long term systemic effects: 0.05 mg/m³
Consumer - Inhalation; Long term systemic effects: 0.05 mg/m³
Consumer - Oral; Long term systemic effects: 18.7 mg/kg/day

PNEC

- STP; 100 mg/l

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. As this product contains ingredients with exposure limits, process enclosures, local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits, if use generates dust, fumes, gas, vapour or mist.

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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	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. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. To protect hands from chemicals, gloves should comply with European Standard EN374.
Other skin and body protection	Wear suitable protective clothing as protection against splashing or contamination.
Hygiene measures	When using do not eat, drink or smoke. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas. Eye wash facilities and emergency shower must be available when handling this product.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m ³ . Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. Wear a suitable dust mask. EN 136/140/141/145/143/149

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Dusty powder.
Colour	Brown.
Odour	No information available.
Odour threshold	No information available.
pH	No information available.
Melting point	No information available.
Pour Point	No information available.
Freezing Point	No information available.
Initial boiling point and range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Other flammability	No information available.
Vapour pressure	No information available.
Vapour density	No information available.
Relative density	No information available.

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Bulk density	No information available.
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Other information	Not determined.
Refractive index	No information available.
Particle size	No information available.
Molecular weight	No information available.
Volatility	No information available.
Saturation concentration	No information available.
Critical temperature	No information available.
Volatile organic compound	No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	There are no known reactivity hazards associated with this product.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not known.
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10.4. Conditions to avoid

Conditions to avoid	Avoid excessive heat for prolonged periods of time.
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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.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

18024 BROWN**Skin corrosion/irritation**

Animal data No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact May be slightly irritating to skin.

Eye contact Solid particles trapped behind the eyelid may cause abrasive damage.

Toxicological information on ingredients.**YELLOW IRON OXIDE****Acute toxicity - oral**

Notes (oral LD₅₀) LD₅₀ > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Respiratory sensitisation

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Respiratory sensitisation	Not sensitising.
<u>Skin sensitisation</u>	
Skin sensitisation	Not sensitising.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	No information available.
Genotoxicity - in vivo	No information available.
<u>Carcinogenicity</u>	
Carcinogenicity	No information available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	No information available.
Reproductive toxicity - development	No information available.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	No information available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	No information available.
<u>Aspiration hazard</u>	
Aspiration hazard	No information available.
<u>Inhalation</u>	
Inhalation	Dust in high concentrations may irritate the respiratory system.
<u>Ingestion</u>	
Ingestion	May cause discomfort if swallowed.
<u>Skin contact</u>	
Skin contact	Skin irritation should not occur when used as recommended.
<u>Eye contact</u>	
Eye contact	Solid particles trapped behind the eyelid may cause abrasive damage.

RED IRON OXIDE

<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	LD ₅₀ > 10000 mg/kg, Oral, Rat
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	No specific test data are available.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	No specific test data are available.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Not irritating.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Not irritating.
<u>Respiratory sensitisation</u>	

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Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising. Guinea pig

Germ cell mutagenicity

Genotoxicity - in vitro Ames test: Negative. Chromosome aberration: Negative. OECD 473

Genotoxicity - in vivo Negative.

Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Reproductive toxicity - development This substance has no evidence of toxicity to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Shortness of breath. Coughing, chest tightness, feeling of chest pressure.

Ingestion May cause discomfort if swallowed. Symptoms following overexposure may include the following: Stomach pain. Diarrhoea. Nausea, vomiting.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact Particles in the eyes may cause irritation and smarting.

HYDRATED MAGNESIUM SILICATE**Acute toxicity - oral**

Notes (oral LD₅₀) No information available.

Acute toxicity - dermal

Notes (dermal LD₅₀) No information available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No information available.

Skin corrosion/irritation

Animal data No information available.

Serious eye damage/irritation

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Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

IARC carcinogenicity IARC Group 2B Possibly carcinogenic to humans.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact May cause temporary eye irritation.

TRIIRON TETRAOXIDE**Acute toxicity - oral**

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

Species Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) No specific test data are available.

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

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Respiratory sensitisation

Respiratory sensitisation Not sensitising.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Genotoxicity - in vivo No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Reproductive toxicity - development No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause stomach pain or vomiting. Diarrhoea.

Skin contact Skin irritation should not occur when used as recommended.

Eye contact Solid particles trapped behind the eyelid may cause abrasive damage.

CHLORITE

General information No specific health hazards known.

DOLOMITE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >2000 mg/kg, Oral,

Acute toxicity - dermal

Notes (dermal LD₅₀) LD₅₀ >2000 mg/kg, Dermal,

Skin corrosion/irritation

Animal data No information available.

Serious eye damage/irritation

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Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion May cause discomfort if swallowed.

Skin contact Prolonged skin contact may cause temporary irritation.

Eye contact May cause temporary eye irritation.

MAGNESIUM CARBONATE

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ > 2000 mg/kg, Oral, Rat

Skin corrosion/irritation

Skin corrosion/irritation No information available.

Serious eye damage/irritation

Serious eye damage/irritation No information available.

Respiratory sensitisation

Respiratory sensitisation No information available.

Skin sensitisation

Skin sensitisation No information available.

Germ cell mutagenicity

18024 BROWN

Genotoxicity - in vitro No information available.

Carcinogenicity

Carcinogenicity No information available.

Reproductive toxicity

Reproductive toxicity - fertility No information available.

Specific target organ toxicity - single exposure

STOT - single exposure No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

Aspiration hazard

Aspiration hazard No information available.

Inhalation Dust in high concentrations may irritate the respiratory system.

Ingestion Gastrointestinal symptoms, including upset stomach. Diarrhoea.

Skin contact Skin irritation should not occur when used as recommended.

Eye contact Particles in the eyes may cause irritation and smarting.

QUARTZ**Carcinogenicity**

IARC carcinogenicity IARC Group 1 Carcinogenic to humans.

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

Ecological information on ingredients.**YELLOW IRON OXIDE**

Ecotoxicity The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

RED IRON OXIDE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

HYDRATED MAGNESIUM SILICATE

Ecotoxicity The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

TRIIRON TETRAOXIDE

Ecotoxicity The product is not expected to be hazardous to the environment. However, large or frequent spills may have hazardous effects on the environment.

18024 BROWN**DOLOMITE****Ecotoxicity**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

MAGNESIUM CARBONATE**Ecotoxicity**

The product components are not classified as environmentally hazardous. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity**Toxicity**

Not considered toxic to fish.

Ecological information on ingredients.**YELLOW IRON OXIDE****Toxicity**

Not considered toxic to fish.

Acute aquatic toxicity**Acute toxicity - fish**

LC₅₀, 96 hour: ≥ 10000 mg/l, Brachydanio rerio (Zebra Fish)
LC₅₀, 96 hour: > 1000 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hour: > 100 mg/l, Daphnia magna

Acute toxicity - microorganisms

EC₅₀, 3 hours: > 1000 mg/l, Activated sludge

RED IRON OXIDE**Toxicity**

Not considered toxic to fish.

Acute aquatic toxicity**Acute toxicity - fish**

LC₅₀, 96 hour: ≥ 10000 mg/l, Brachydanio rerio (Zebra Fish)
LC₅₀, 96 hour: > 1000 mg/l, Leuciscus idus (Golden orfe)
LC₅₀, 96 hour: > 1000 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hour: > 10000 mg/l, Daphnia magna

Acute toxicity - microorganisms

EC₅₀, 3 hours: > 10000 mg/l, Activated sludge

HYDRATED MAGNESIUM SILICATE**Toxicity**

Not considered toxic to fish.

TRIIRON TETRAOXIDE**Acute aquatic toxicity****Acute toxicity - fish**

LC₅₀, 48 hours: > 1000 mg/l, Leuciscus idus (Golden orfe)
LC₅₀, 96 hours: ≥ 10000 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic invertebrates

EC₅₀, 48 hours: > 10000 mg/l, Daphnia magna

18024 BROWN**DOLOMITE****Acute aquatic toxicity**

Acute toxicity - fish No information available.

MAGNESIUM CARBONATE

Toxicity Not considered toxic to fish.

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 1875 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 490 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: > 65 mg/l, Desmodesmus subspicatus
OECD 201

Acute toxicity - microorganisms EC₅₀, 3 hour: > 372 mg/l, Activated sludge
OECD 209

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

Ecological information on ingredients.**YELLOW IRON OXIDE**

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

RED IRON OXIDE

Persistence and degradability The product contains only inorganic substances which are not biodegradable.

HYDRATED MAGNESIUM SILICATE

Persistence and degradability There are no data on the degradability of this product.

TRIIRON TETRAOXIDE

Persistence and degradability The product is not expected to be biodegradable.

DOLOMITE

Persistence and degradability There are no data on the degradability of this product.

MAGNESIUM CARBONATE

Persistence and degradability The product contains inorganic substances which are not biodegradable.

12.3. Bioaccumulative potential

18024 BROWN

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

Ecological information on ingredients.

YELLOW IRON OXIDE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

RED IRON OXIDE

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient No information available.

HYDRATED MAGNESIUM SILICATE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

TRIIRON TETRAOXIDE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

DOLOMITE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

MAGNESIUM CARBONATE

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility Not determined.

Ecological information on ingredients.

YELLOW IRON OXIDE

Mobility The product is insoluble in water.

RED IRON OXIDE

Mobility The product is insoluble in water.

HYDRATED MAGNESIUM SILICATE

Mobility The product is insoluble in water and will spread on the water surface.

TRIIRON TETRAOXIDE

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Mobility The product is insoluble in water and will sediment in water systems.

CHLORITE

Mobility The product is insoluble in water.

DOLOMITE

Mobility No information available.

MAGNESIUM CARBONATE

Mobility Slightly 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.

Ecological information on ingredients.

YELLOW IRON OXIDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

RED IRON OXIDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

HYDRATED MAGNESIUM SILICATE

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

TRIIRON TETRAOXIDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

DOLOMITE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

MAGNESIUM CARBONATE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not determined.

Ecological information on ingredients.

YELLOW IRON OXIDE

18024 BROWN

Other adverse effects Not determined.

RED IRON OXIDE

Other adverse effects Not determined.

HYDRATED MAGNESIUM SILICATE

Other adverse effects Not available.

TRIIRON TETRAOXIDE

Other adverse effects Not determined.

DOLOMITE

Other adverse effects No information available.

MAGNESIUM CARBONATE

Other adverse effects Not determined.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

General information Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

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

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.

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

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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

EU legislation

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) (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 2015/830 of 28 May 2015.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

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Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
 CAS: Chemical Abstracts Service.
 DNEL: Derived No Effect Level.
 IATA: International Air Transport Association.
 IMDG: International Maritime Dangerous Goods.
 Kow: Octanol-water partition coefficient.
 LC₅₀: Lethal Concentration to 50 % of a test population.
 LD₅₀: Lethal Dose to 50% of a test population (Median Lethal Dose).
 PBT: Persistent, Bioaccumulative and Toxic substance.
 PNEC: Predicted No Effect Concentration.
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
 vPvB: Very Persistent and Very Bioaccumulative.
 IARC: International Agency for Research on Cancer.
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.
 cATpE: Converted Acute Toxicity Point Estimate.
 BCF: Bioconcentration Factor.
 BOD: Biochemical Oxygen Demand.
 EC₅₀: 50% of maximal Effective Concentration.
 LOAEC: Lowest Observed Adverse Effect Concentration.
 LOAEL: Lowest Observed Adverse Effect Level.
 NOAEC: No Observed Adverse Effect Concentration.
 NOAEL: No Observed Adverse Effect Level.
 NOEC: No Observed Effect Concentration.
 LOEC: Lowest Observed Effect Concentration.
 DMEL: Derived Minimal Effect Level.
 EL50: Exposure Limit 50
 hPa: Hectopascal
 LL50: Lethal Loading fifty
 OECD: Organisation for Economic Co-operation and Development
 POW: Octanol-water partition coefficient
 SCBA: self-contained breathing apparatus
 STP: Sewage Treatment Plant
 VOC: Volatile Organic Compounds

Classification abbreviations and acronyms

Acute Tox. = Acute toxicity
 Aquatic Acute = Hazardous to the aquatic environment (acute)
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Key literature references and sources for data

Supplier's information.

Classification procedures according to Regulation (EC) 1272/2008

NC: Calculation method.

Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

19/03/2021

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