

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

1.1. Product identifier

Product form : Mixture

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

1.2.1. Relevant identified uses

Main use category : Professional use
Industrial/Professional use spec : For professional use only
Use of the substance/mixture : Fillers Heat transfer agents
Function or use category : Heat transfer agents, Fillers

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Premier Farnell plc
150 Armley Road, Leeds, LS12 2QQ
+44 (0) 8701 202530

1.4. Emergency telephone number

+44 1865 407333

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

No additional information available

Section 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ALUMINA	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	70 - 80	Not classified
SILICONE - A	(CAS-No.) 90337-93-2	20 - 25	Not classified

Diboron Trioxide substance listed as REACH Candidate	(CAS-No.) 1303-86-2 (EC-No.) 215-125-8 (EC Index-No.) 005-008-00-8	0.1 - 0.3	Repr. 1B, H360FD
Toluene	(CAS-No.) 108-88-3 (EC-No.) 203-625-9 (EC Index-No.) 601-021-00-3	0.1 - 0.25	Flam. Liq. 2, H225 Repr. 2, H361d Asp. Tox. 1, H304 STOT RE 2, H373 Skin Irrit. 2, H315 STOT SE 3, H336

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
Diboron Trioxide	(CAS-No.) 1303-86-2 (EC-No.) 215-125-8 (EC Index-No.) 005-008-00-8	(3.1 =<C < 100) Repr. 1B, H360FD

Full text of H-statements: see section 16

Section 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Move the affected person away from the contaminated area and into the fresh air. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Drink plenty of water. Do NOT induce vomiting. Get immediate medical advice/attention.

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

No additional information available

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

No additional information available

Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO₂, or water spray or regular foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Carbon oxides. Nitrogen oxides.

5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers.
Protection during firefighting breathing apparatus.	: Wear recommended personal protective equipment. Self-contained

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Avoid contact with skin and eyes. Ensure adequate ventilation.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid release to the environment. Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

For containment : Store in a closed container.
Methods for cleaning up : Avoid creating or spreading dust. Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

No additional information available

Section 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Always wash hands after handling the product. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Store in a dry, cool area.
Store in a well-ventilated place. Keep away from ignition sources.

7.3. Specific end use(s)

No additional information available

Section 8: Exposure controls/personal protection

8.1. Control parameters

ALUMINA (1344-28-1)		
Germany	TRGS 910 Acceptable concentration notes	
United Kingdom	Local name	Aluminium oxides
United Kingdom	WEL TWA (mg/m ³)	10 mg/m ³ inhalable dust 4 mg/m ³ respirable dust
United Kingdom	Regulatory reference	EH40/2005 (Third edition, 2018). HSE

8.2. Exposure controls

Appropriate engineering controls

Ensure good ventilation of the work station. Do not breathe dust. Always wash hands after handling the product. Chemical resistant gloves (according to European standard NF EN 374 or equivalent).

Personal protective equipment

Wear recommended personal protective equipment. Safety glasses. Protective clothing. An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area. Filter type A (EN14387). Gloves. Chemical resistant gloves (according to European standard EN 374 or equivalent).

Personal protective equipment symbol(s):



Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Pink
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

Section 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions of storage and use.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Toluene (108-88-3)	
LD50 oral rat	5000 mg/kg
LD50 dermal rabbit	12000 mg/kg
LC50 inhalation rat (ppm)	≈ 26700 ppm/1h

Diboron Trioxide (1303-86-2)	
LD50 oral rat	≈ 2600 mg/kg OECD Test Guideline 401
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 2.12 mg/l/4h OECD Test Guideline 403

Skin corrosion/irritation : Not classified
pH: Approx. 7

Serious eye damage/irritation : Not classified

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Toluene (108-88-3)	
LC50 fish 1	5.5 mg/l Oncorhynchus kisutch, flow-through system, fresh water, experimental value

Diboron Trioxide (1303-86-2)	
LC50 fish 1	≈ 79.7 mg/l Pimephales promelas
EC50 Daphnia 1	≈ 115 mg/l Daphnia dubia
EC50 Daphnia 2	≈ 133 mg/l Daphnia magna
ErC50 (algae)	≈ 52.5 mg/l Selenastrum capricornutum - 74.5 h

12.2. Persistence and degradability

Toluene (108-88-3)	
Persistence and degradability	Biodegradeable in soil. Readily biodegradeable in water.
Biochemical oxygen demand (BOD)	2.15 g O ₂ /g substance
Chemical oxygen demand (COD)	2.52 g O ₂ /g substance
ThOD	3.13 g O ₂ /g substance
BOD (% of ThOD)	0.69 % ThOD

ALUMINA (1344-28-1)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Toluene (108-88-3)	
BCF fish 1	90 mg/l 72 h, Leuciscus idus, static system, fresh water, experimental value
Bioconcentration factor (BCF REACH)	< 500 Low potential for bioaccumulation

ALUMINA (1344-28-1)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

Toluene (108-88-3)	
Surface tension	27.73 N/m 25 deg C

12.5. Results of PBT and vPvB assessment

Component	
Diboron Trioxide (1303-86-2)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

Section 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Avoid discharge to the environment.

Section 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

	ADR	IMDG	IATA	ADN	RID
14.1. UN number					
	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name					
	Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Special transport precautions	: Can be shipped as non-dangerous goods
Overland transport	: Not regulated
Transport by sea	: Not regulated
Air transport	: Not regulated
Inland waterway transport	: Not regulated
Rail transport	: Not regulated

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

Not applicable

Section 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Diboron trioxide (EC 215-125-8, CAS 1303-86-2)

Contains no REACH Annex XIV substances

Contains no substance subject to REGULATION (EU) No 649/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 concerning the export and import of hazardous chemicals.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Asp. Tox. 1	Aspiration hazard, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2

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STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H360FD	May damage fertility. May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH210	Safety data sheet available on request.

Part Number
MPGCS-010TCI-300-0.23
MPGCS-013TCI-300-0.18
MPGCS-018TCI-300-0.23

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