

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

1.1. Product identifier

Product name: MAGNESIUM PERCHLORATE SELF INDICATING GRANULAR

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

Use of substance / mixture: PC21: Laboratory chemicals. PROC15: Use as laboratory reagent

1.3. Details of the supplier of the safety data sheet

Company name: Elemental Microanalysis Ltd
1 Hameldown Road Okehampton
Okehampton
Devon
EX20 1UB
United Kingdom
Tel: 44(0)183754446
Fax: 44(0)183754544
Email: info@microanalysis.co.uk

1.4. Emergency telephone number

Emergency tel: +44 (0) 7990 767375
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: * Acute Tox. 4: H302; Eye Irrit. 2: H319; Aquatic Chronic 1: H410; Carc. 1Ai: H350i; Muta. 2: H341; Repr. 1B: H360F; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens. 1: H317

Most important adverse effects: Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects. May cause cancer by inhalation. May damage fertility. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements: * H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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H341: Suspected of causing genetic defects.
H350i: May cause cancer by inhalation.
H360F: May damage fertility.
H410: Very toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS07: Exclamation mark

GHS08: Health hazard

GHS09: Environmental



Signal words: Danger

Precautionary statements: P280: Wear protective gloves/protective clothing/eye protection/face protection.

P284: Wear respiratory protection.

P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.

P302+P352: IF ON SKIN: Wash with plenty of water.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P362+P364: Take off contaminated clothing and wash it before reuse.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

MAGNESIUM PERCHLORATE.

EINECS	CAS	PBT / WEL	CLP Classification	Percent
233-108-3	64010-42-0	-	Ox. Sol. 1: H271; Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Irrit. 2: H319	90-99%

COBALT DICHLORIDE

231-589-4	7646-79-9	-	Muta. 2: H341; Repr. 1B: H360F; Acute Tox. 4: H302; Resp. Sens. 1: H334; Skin Sens. 1: H317; Aquatic Chronic 1: H410; Carc. 1B: H350; Aquatic Acute 1: H400; Carc. 1Ai: H350i	1-10%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

[cont...]

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Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

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

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing.

Delayed / immediate effects: Delayed effects can be expected after long-term exposure.

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

Immediate / special treatment: Not applicable.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Do not create dust. Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. Mark out the contaminated area with signs and prevent access to unauthorised personnel. If outside keep bystanders upwind and away from danger point.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

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Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Avoid the formation or spread of dust in the air.
Ensure there is sufficient ventilation of the area. Do not handle in a confined space.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

COBALT DICHLORIDE

Workplace exposure limits:

Respirable dust:

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
EU	-	-	0.1mg/m3	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Granules

Colour: Blue

Odour: Odourless

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: Not miscible

Boiling point/range°C: No data available.

Melting point/range°C: No data available.

Flammability limits %: lower: No data available.

upper: No data available.

Flash point°C: No data available.

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Autoflammability°C: No data available.

Relative density: 2.21

VOC g/l: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

COBALT DICHLORIDE

ORAL	RAT	LD50	418	mg/kg
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Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	INH DRM	Hazardous: calculated

[cont...]

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Germ cell mutagenicity	--	Hazardous: calculated
Carcinogenicity	--	Hazardous: calculated
Reproductive toxicity	--	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: Exposure may cause coughing or wheezing.

Delayed / immediate effects: Delayed effects can be expected after long-term exposure.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

COBALT DICHLORIDE

ALGAE	96H ErC50	0.52	mg/l
Daphnia magna	48H EC50	1.6-1.6	mg/l
FISH	96H LC50	0.33	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

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Section 14: Transport information

14.1. UN number

UN number: UN1479

14.2. UN proper shipping name

Shipping name: OXIDIZING SOLID, N.O.S.

14.3. Transport hazard class(es)

Transport class: 5.1

14.4. Packing group

Packing group: II

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

Tunnel code: E

Transport category: 2

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H271: May cause fire or explosion; strong oxidiser.

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341: Suspected of causing genetic defects.

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H360F: May damage fertility.

H410: Very toxic to aquatic life with long lasting effects.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.