

Created: 19 October 2021

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: 30% FUMITE OPP SMOKE GENERATOR
- Contains: 2-phenylphenol
Potassium chlorate
- UFI: 4M60-U0UE-W00R-A223

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

- Use of the substance/mixture: Disinfectant Smoke Generator (FU)
- Use advised against: For professional use only.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Octavius Hunt Ltd
- Address of Supplier: Redfield
Bristol
BS5 9NQ
UK
- Telephone: +44 (0) 117 955 5304
- Email: info@octavius-hunt.co.uk
- Website: www.octaviushunt.co.uk

1.4 Emergency telephone number

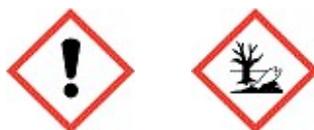
- Emergency Telephone: + 44 (0) 7720 051020 (24 hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, H410
- Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

2.2 Label elements



Signal Word: Warning

Hazard statements

- H315 - Causes skin irritation.
- H319 - Causes serious eye irritation.
- H335 - May cause respiratory irritation.
- H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P261 - Avoid breathing dust/fume.
- P264 - Wash skin thoroughly after handling.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313 - If eye irritation persists: Get medical advice/attention.
- P501 - Dispose of contents/container to an approved hazardous/special waste disposal facility in

Created: 19 October 2021

SECTION 2: Hazards identification (....)

accordance with local and national regulations

Supplemental Hazard information (EU)

None

2.3 Other hazards

- May form explosible dust-air mixture if dispersed
- Ignites readily. Product burns without a flame to give a dense white harmful smoke.
- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII
- Does not contain any substances with endocrine disrupting properties

SECTION 3: Composition/information on ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

- Contains the following hazardous ingredients or ingredients with a workplace exposure limit:

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	35 - 45% w/w	1332-58-7	310-194-1	Not classified (Substance with a workplace exposure limit)	-	-	Yes
2-phenylpheol (ISO) Biphenyl-2-ol; 2-hydroxybiphenyl	30% w/w	90-43-7	201-993-5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M factor (Chronic) = 1	-	No
Potassium chlorate	10 - 20% w/w	3811-04-9	223-289-7	Ox. Liq. 1, H271 Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Chronic 2, H411	-	01-2119494917-18-XXXX	No
Magnesium carbonate	< 10% w/w	546-93-0	208-915-9	Not classified (Substance with a workplace exposure limit)	-	-	Yes

SECTION 4: First aid measures

Rescuers should put on approved personal protective equipment (PPE) before administering first aid

Rescuers should take suitable precautions to avoid becoming casualties themselves

4.1 Description of first aid measures

Contact with eyes

- If substance has got into eyes, immediately wash out with plenty of water for several minutes
- Irrigate eyes thoroughly whilst lifting eyelids
- Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

Contact with skin

- Take off contaminated clothing and wash it before reuse.

Created: 19 October 2021

SECTION 4: First aid measures (....)

Wash affected area with plenty of soap and water
If skin irritation occurs: Get medical advice/attention.

Ingestion

Rinse mouth with water (do not swallow)
Give 200-300mls (half pint) water to drink
Do not induce vomiting because of risk of aspiration into the lungs. If aspiration is suspected obtain immediate medical attention
If vomiting occurs turn patient on side
Get medical advice/attention.

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
If unconscious, place person in recovery position
Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation
Get immediate medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed**Contact with eyes**

Causes redness and irritation
May cause redness and swelling

Contact with skin

Causes redness and irritation
Possible blistering of the skin of affected areas

Ingestion

Can form methaemoglobin in the blood, causing cyanosis
May cause burns to mouth and throat
May cause stomach pain
There may be bleeding from the mouth or nose.
The ingestion of significant quantities may cause dizziness, confusion, headache or stupor

Inhalation

May cause respiratory irritation
May cause shortness of breath
May cause coughing and tightness of chest

4.3 Indication of any immediate medical attention and special treatment needed

- Risk of methemoglobinemia. Not to be treated with methylthionine.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media: Sand/earth; alcohol resistant foam; water spray; carbon dioxide
- Unsuitable extinguishing media: Do not use water jets; Dry agent extinguishers are unsuitable and should not be used

5.2 Special hazards arising from the substance or mixture

- Ignites readily
- Contains an oxidising agent; may assist combustion
- May form explosive dust/air mixtures
- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include oxygen, potassium chloride, carbon oxides, nitrogen oxides

Created: 19 October 2021

SECTION 5: Firefighting measures (....)

5.3 Advice for firefighters

- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
- Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- No action shall be taken involving any personal risk or without suitable training
- Only trained and authorised personnel should carry out emergency response
- Avoid formation of dust
- Shut off all ignition sources
- Personal precautions for non-emergency personnel: Avoid breathing dust/fume; Avoid contact with skin and eyes; Wear protective clothing as per section 8; Wash thoroughly after handling; Eyewash bottles should be available
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear chemical protection suit; Wear self-contained breathing apparatus (SCBA)

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Do not absorb spillage in sawdust or other combustible material
- Avoid formation of dust
- Shut off all ignition sources
- Take action to prevent static discharges.
- Do not allow to enter public sewers and watercourses
- Small spills
 - Wipe up spillage with damp absorbent cloth or towel
 - Wash spill site with water and detergent
- Large spills
 - Evacuate the area and keep personnel upwind
 - Damp down to avoid dust generation
 - Sweep or shovel-up spillage and remove to a safe place
 - Place in appropriate container
 - Seal containers and label them
 - Remove contaminated material to safe location for subsequent disposal
 - Ventilate the area and wash spill site after material pick-up is complete

6.4 Reference to other sections

- See section(s): 7, 8 & 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Read label before use.
- Prevent formation of dust
- Take precautionary measures against static discharges
- If the operator is unable to leave the area immediately after lighting the product, then respiratory protection must be worn

Created: 19 October 2021

SECTION 7: Handling and storage (....)

- Avoid contact with skin and eyes
- Wear protective clothing as per section 8
- Do not eat, drink or smoke when using this product.
- Keep away from heat and sources of ignition
- Avoid contact with acids and alkalis
- Avoid contact with reducing agents
- Keep away from combustible material
- Avoid release to the environment.
- Take off contaminated clothing.
- Contaminated work clothing should not be allowed out of the workplace.
- Contaminated clothing should be laundered before reuse
- Ensure eyewash stations and safety showers are nearby

7.2 Conditions for safe storage, including any incompatibilities

- Shelf life: 2 years when stored in the original unopened sales container at ambient temperatures
- Store in a cool, dry well-ventilated place. Keep container tightly closed.
- Store at < 40 °C
- Keep locked up and out of reach of children
- Keep away from combustible material
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep away from food, drink and animal feedingstuffs
- Incompatible with strong acids and bases
- Incompatible with reducing agents

7.3 Specific end use(s)

Disinfectant Smoke Generator (FU)

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Talc ($Mg_3H_2(SiO_3)_4$)

DNEL (long term) 1 mg/m³ (UK, respirable dust)
 DNEL (inhalational) 2.16 mg/m³ Industry, Long Term, Systemic Effects
 DNEL (inhalational) 2.16 mg/m³ Industry, Acute/Short Term, Systemic Effects
 DNEL (inhalational) 3.6 mg/m³ Industry, Long Term, Local Effects
 DNEL (inhalational) 3.6 mg/m³ Industry, Acute/Short Term, Local Effects
 DNEL (dermal) 43.2 mg/kg bw/day Industry, Long Term, Systemic Effects
 DNEL (dermal) 4.54 mg/cm² Industry, Long Term, Local Effects
 DNEL (inhalational) 1.08 mg/m³ Consumer, Long Term, Systemic Effects
 DNEL (inhalational) 1.08 mg/m³ Consumer, Acute/Short Term, Systemic Effects
 DNEL (inhalational) 1.8 mg/m³ Consumer, Long Term, Local Effects
 DNEL (inhalational) 1.8 mg/m³ Consumer, Acute/Short Term, Local Effects
 DNEL (dermal) 21.6 mg/kg bw/day Consumer, Long Term, Systemic Effects
 DNEL (dermal) 2.27 mg/cm² Consumer, Long Term, Local Effects
 DNEL (oral) 160 mg/kg bw/day Consumer, Long Term, Systemic Effects
 DNEL (oral) 160 mg/kg bw/day Consumer, Acute/Short Term, Systemic Effects
 PNEC aqua (freshwater) 597.97 mg/L

Created: 19 October 2021

SECTION 8: Exposure controls/personal protection (....)

PNEC aqua (intermittent releases, freshwater) 597.97 mg/L
 PNEC aqua (marine water) 141.26 mg/L
 PNEC aqua (intermittent releases, marine water) 141.26 mg/L
 PNEC sediment (freshwater) 31.33 mg/kg
 PNEC sediment (marine water) 3.13 mg/kg
 PNEC (air) 10 mg/m³

2-phenylphenol (ISO)

DNEL (inhalational) 19.25 mg/m³ Industry, Long Term, Systemic Effects
 DNEL (dermal) 21.84 mg/kg bw/day Industry, Long Term, Systemic Effects
 DNEL (inhalational) 1.2 mg/m³ Consumer, Long Term, Systemic Effects
 DNEL (dermal) 400 µg/kg bw/day Consumer, Long Term, Systemic Effects
 DNEL (oral) 400 µg/kg bw/day Consumer, Long Term, Systemic Effects
 PNEC aqua (freshwater) 900 ng/L
 PNEC aqua (intermittent releases, freshwater) 27 µg/L
 PNEC aqua (marine water) 90 ng/L
 PNEC (STP) 560 µg/L
 PNEC sediment (freshwater) 128.4 µg/kg
 PNEC sediment (marine water) 12.84 µg/kg
 PNEC terrestrial (soil) 2.5 mg/kg
 PNEC secondary poisoning (food) 1.87 mg/kg

Potassium chlorate

DNEL (inhalational) 700 µg/m³ Industry, Long Term, Systemic Effects
 DNEL (dermal) 5 mg/kg bw/day Industry, Long Term, Systemic Effects
 DNEL (oral) 50 µg/kg bw/day Consumer, Long Term, Systemic Effects
 PNEC aqua (freshwater) 1.15 mg/L
 PNEC aqua (marine water) 1.15 mg/L
 PNEC (STP) 115 mg/L
 PNEC sediment (freshwater) 4.14 mg/kg
 PNEC sediment (marine water) 4.14 mg/kg
 PNEC terrestrial (soil) 3.83 mg/kg
 PNEC secondary poisoning (food) 12.78 mg/kg

Magnesium carbonate

WEL (long term) 10 mg/m³ (UK, inhalable dust)
 WEL (long term) 4 mg/m³ (UK, respirable dust)
 DNEL (oral) 7.23 mg/kg bw/day Consumer, Long Term, Systemic Effects
 DNEL (oral) 7.23 mg/kg bw/day Consumer, Acute/Short Term, Systemic Effects

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls
 - Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines
 - Provide appropriate exhaust ventilation at places where airborne dust is generated
- Respiratory protection
 - If the operator is unable to leave the area immediately after lighting the product, then respiratory protection must be worn
 - Where a reusable half mask respirator is required, use EN 140, with gas/vapour filter EN 14387 type ABEK, or EN 405; EN 1827 and EN 143 particle filter
 - Where a full face mask respirator is required, use EN 136, with gas/vapour filter EN 14387 type ABEK and particle filter EN 143
- Skin protection
 - Wear suitable protective clothing
 - Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
 - The selection of a suitable glove depends on work conditions and whether the product is present on

Created: 19 October 2021

SECTION 8: Exposure controls/personal protection (....)

- its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
(< 1 hour) Polychloroprene - CR or Polyvinyl chloride - PVC are recommended
- Eye/face protection
Wear safety glasses approved to standard EN 166.
If dust is formed, wear goggles giving complete eye protection approved to standard EN 166.
 - Thermal hazards
Not applicable
 - Hygiene measures
Contaminated clothing should be laundered before reuse
Do not eat, drink or smoke when using this product.
Ensure eyewash stations and safety showers are nearby
 - Environmental exposure controls
Avoid release to the environment.
Do not empty into drains



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Physical state: Solid. Powder in a metallic tin.
- Colour: Off-white
- Odour: Phenolic
- Melting point/freezing point: Not determined; No data available
- Boiling point or initial boiling point and boiling range: Not determined; No data available
- Flammability: Combustible solid
- Lower and upper explosion limit: Lower explosive limit: (2-phenylphenol) 1.4% (V) (in air); Upper explosive limit: (2-phenylphenol) 9.5% (V) (in air)
- Flash point: Not applicable
- Auto-ignition temperature: 335 °C
- Decomposition temperature: No data available
- pH: No data available
- Kinematic viscosity: Not applicable
- Solubility: Partially soluble in water
- Partition coefficient n-octanol/water (log value): See subsection 12.6
- Vapour pressure: No data available
- Density and/or relative density: Not determined; No information available
- Relative vapour density: No data available
- Particle characteristics: No data available

9.2 Other information

- Oxidising properties: Contains an oxidising agent; may assist combustion
- Dust Explosion Classification: ST-2 Strong Explosion (VDI 3673)

SECTION 10: Stability and reactivity

10.1 Reactivity

- No hazardous reactions known if used for its intended purpose

Created: 19 October 2021

SECTION 10: Stability and reactivity (....)

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- Reacts with combustible material
- Reacts with acids liberating toxic gas (chlorine)

10.4 Conditions to avoid

- Avoid formation of dust
- Keep away from heat and sources of ignition
- Keep away from static electricity

10.5 Incompatible materials

- Incompatible with combustible material
- Incompatible with strong acids
- Incompatible with alkalis (strong bases)
- Incompatible with reducing agents

10.6 Hazardous decomposition products

- Decomposition products may include oxygen, potassium chloride, carbon oxides, nitrogen oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- Acute Toxicity

Based on available data, the classification criteria are not met

Substances

Chemical Name	LD50 (oral, rat)	LC50 (inhalation, rat)	LD50 (dermal, rabbit)
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	3 870 - 5 000 mg/kg	(4 h) 2.1 mg/L	2 000 mg/kg (rat)
2-phenylphenol (ISO)	2 733 mg/kg	(4 h) 36 mg/m ³	2 000 mg/kg (rat)
Potassium chlorate	5 000 mg/kg	(4 h) 5.1 mg/L	> 2 000 mg/kg
Magnesium carbonate	2 000 mg/kg	No data available	No data available

- Skin corrosion/irritation

Causes skin irritation.

Classification based on calculation and concentration thresholds

Substances

Chemical Name	Irritation/corrosion
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	No adverse effect observed (not irritating)
2-phenylphenol (ISO)	Adverse effect observed (irritating)
Potassium chlorate	No adverse effect observed (not irritating)
Magnesium carbonate	No adverse effect observed (not irritating)

- Serious eye damage/irritation

Causes serious eye irritation.

Classification based on calculation and concentration thresholds

Substances

Chemical Name	Irritation/corrosion
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	No adverse effect observed (not irritating)
2-phenylphenol (ISO)	Adverse effect observed (irritating)
Potassium chlorate	No adverse effect observed (not irritating)

Created: 19 October 2021

SECTION 11: Toxicological information (....)

Magnesium carbonate	No adverse effect observed (not irritating)
---------------------	---------------------------------------------

- Respiratory or skin sensitisation
Based on available data, the classification criteria are not met

Substances

Chemical Name	Skin sensitisation	Respiratory sensitisation
Talc ($Mg_3H_2(SiO_3)_4$)	No adverse effect observed (not sensitising)	No adverse effect observed (not sensitising)
2-phenylphenol (ISO)	No adverse effect observed (not sensitising)	No study available
Potassium chlorate	No adverse effect observed (not sensitising)	No study available
Magnesium carbonate	No data available	No data available

- Germ cell mutagenicity
Based on available data, the classification criteria are not met

Substances

Chemical Name	Toxicity - In Vitro	Toxicity - In Vivo
Talc ($Mg_3H_2(SiO_3)_4$)	No adverse effect observed (negative)	No adverse effect observed (negative)
2-phenylphenol (ISO)	No adverse effect observed (negative)	No adverse effect observed (negative)
Potassium chlorate	No adverse effect observed (negative)	No adverse effect observed (negative)
Magnesium carbonate	No data available	No data available

- Carcinogenicity
Talc ($Mg_3H_2(SiO_3)_4$) is listed in Annex III of REACH as # Suspected carcinogen: IARC monographs classified the substance as carcinogenic or probably/possibly carcinogenic; carcinogen according to ISSCAN
Talc not containing asbestos or asbestiform is classified by IARC as Group 3 (Not classifiable as to its carcinogenicity to humans)
2-phenylphenol is classified by IARC as Group 3 (Not classifiable as to its carcinogenicity to humans)

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Talc ($Mg_3H_2(SiO_3)_4$)	100 mg/kg bw/day	18 mg/m ³ (mouse)	2.5 mg/kg bw/day
2-phenylphenol (ISO)	200 mg/kg bw/day	No data available	No data available
Potassium chlorate	No data available	No data available	No data available
Magnesium carbonate	No data available	No data available	No data available

- Reproductive toxicity
Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Talc ($Mg_3H_2(SiO_3)_4$)	900 mg/kg bw/day (Effect on fertility) 1 600 mg/kg bw/day (Effect on developmental toxicity)	69.57 mg/m ³ (Effect on fertility) 69.57 mg/m ³ (Effect on developmental toxicity)	216 mg/kg bw/day (rabbit) (Effect on fertility) 40 mg/kg bw/day (Effect on developmental toxicity)
2-phenylphenol (ISO)	500 mg/kg bw/day (Effect on fertility) 250 mg/kg bw/day (rabbit) (Effect on developmental toxicity)	No data available	No data available
Potassium chlorate	500 mg/kg bw/day (Effect on fertility) 475 mg/kg bw/day (Effect on developmental toxicity)	No data available	No data available
Magnesium carbonate	No data available	No data available	No data available

Created: 19 October 2021

SECTION 11: Toxicological information (....)

- Specific target organ toxicity (STOT) - single exposure
This product is classified as STOT SE 3 (may cause respiratory irritation)
Classification based on calculation and concentration thresholds

Substances

Chemical Name	Route	Remarks
Talc ($Mg_3H_2(SiO_3)_4$)	Respiratory	No adverse effect observed (not irritating)
2-phenylphenol (ISO)	Respiratory	STOT SE 3, H335
Potassium chlorate	Respiratory	No study available
Magnesium carbonate	Respiratory	No data available

- Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Talc ($Mg_3H_2(SiO_3)_4$)	100 mg/kg bw/day	2 - 18 mg/m ³	2.5 mg/kg bw/day
2-phenylphenol (ISO)	39 - 248 mg/kg bw/day	No data available	100 - 1 000 mg/kg bw/day
Potassium chlorate	100 mg/kg bw/day	No data available	No data available
Magnesium carbonate	299 - 1 000 mg/kg bw/day	No data available	No data available

- Aspiration hazard
Based on available data, the classification criteria are not met
- Contact with eyes
Causes redness and irritation
May cause redness and swelling
- Contact with skin
Causes redness and irritation
Possible blistering of the skin of affected areas
- Ingestion
Can form methaemoglobin in the blood, causing cyanosis
May cause burns to mouth and throat
May cause stomach pain
There may be bleeding from the mouth or nose.
The ingestion of significant quantities may cause dizziness, confusion, headache or stupor
- Inhalation
May cause respiratory irritation
May cause shortness of breath
May cause coughing and tightness of chest

11.2 Information on other hazards

- Does not contain any substances with endocrine disrupting properties

SECTION 12: Ecological information

12.1 Toxicity

- Very toxic to aquatic life with long lasting effects.
- Classification based on calculation and concentration thresholds
- M factor (Chronic) 2-phenylphenol (ISO) = 1

Created: 19 October 2021

SECTION 12: Ecological information (....)

Substances

Chemical Name	LC ₅₀ (fish)	EC ₅₀ (aquatic invertebrates)	EC ₅₀ (aquatic algae)
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	(4 days) 89.581 - 110 g/L	LC ₅₀ (48 h) 36.812 g/L	(4 days) 7.203 g/L
2-phenylphenol (ISO)	(4 days) 4.5 mg/L	LC ₅₀ (48 h) 2.7 mg/L	(72 h) 1.35 - 3.57 mg/L
Potassium chlorate	(4 days) 1 g/L	(48 h) 1 g/L	(72 h) 1.9 - 500 mg/L
Magnesium carbonate	(4 days) 2.12 - 2.82 g/L	LC ₅₀ (48 h) 140 - 322 mg/L	(72 h) 18.5 - 100 mg/L

12.2 Persistence and degradability

- Some ingredients are biodegradable

Substances

Chemical Name	Biodegradation
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	Not applicable, inorganic
2-phenylphenol (ISO)	Readily biodegradable in water (100%)
Potassium chlorate	Under test conditions no biodegradation observed (100%)
Magnesium carbonate	Not applicable, inorganic

12.3 Bioaccumulative potential

- Chlorate is converted to chlorite in plants, which accumulates in cells until toxic concentrations are reached, when the plant dies

Substances

Chemical Name	Bioconcentration Factor (BCF)	Log Kow
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	3.16 L/kg ww	-9.4 @ 25 °C
2-phenylphenol (ISO)	21.7 - May accumulate in the tissues of aquatic organisms	Log Pow 3.18
Potassium chlorate	Low potential for bioaccumulation (Log Kow < 3)	-2.9 @ 20 °C and pH 0
Magnesium carbonate	Bioaccumulation is not expected	Not applicable, inorganic

12.4 Mobility in soil

- Partially soluble in water

Substances

Chemical Name	Adsorption/desorption	Mobility
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	Koc 31.82 at 20°C	No data available
2-phenylphenol (ISO)	Log Koc 2.4 - 2.6	May adsorb to suspended soils and sediments
Potassium chlorate	Low potential for adsorption	Soluble in water
Magnesium carbonate	Not applicable, inorganic	No data available

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Endocrine disrupting properties

- Does not contain any substances with endocrine disrupting properties

12.7 Other adverse effects

- No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Dispose of product and packaging in accordance with national waste regulations
- This material and/or its container must be disposed of as hazardous waste

13.2 Classification

Created: 19 October 2021

SECTION 13: Disposal considerations (....)

- The waste must be identified according to the List of Wastes (2000/532/EC)
- Hazardous Property Code(s): HP 4 Irritant; HP 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity; HP 14 Ecotoxic

SECTION 14: Transport information

UN 3077 and UN 3082, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5L/kg or less, are not subject to the provisions of ADR, RID, IMDG or IATA, provided the package meets the general packing quality provisions.

**14.1 UN number or ID number**

- UN No.: 3077

14.2 UN proper shipping name

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Phenylphenol mixture)

14.3 Transport hazard class(es)

- Hazard Class: 9

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Marine Pollutant

14.6 Special precautions for user

- Not Classified

14.7 Maritime transport in bulk according to IMO instruments

- Not applicable

14.8 Road/Rail (ADR/RID)

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Phenylphenol mixture)
- ADR UN No.: 3077
- ADR Hazard Class: 9
- ADR Packing Group: III
- Tunnel Code: (-)

14.9 Sea (IMDG)

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Phenylphenol mixture)
- IMDG UN No.: 3077
- IMDG Hazard Class: 9
- IMDG Packing Group: III

14.10 Air (ICAO/IATA)

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-Phenylphenol mixture)
- ICAO UN No.: 3077
- ICAO Hazard Class: 9

Created: 19 October 2021

SECTION 14: Transport information (....)

- ICAO Packing Group: III
-

SECTION 15: Regulatory information

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

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 (as amended by Regulation (EU) 2020/878) and UK REACH
- The GB Classification, Labelling and Packaging Regulation (GB CLP) applies in Great Britain
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- The COSHH Regulations apply in the UK
- UN 3077 and UN 3082, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5L/kg or less, are not subject to the provisions of ADR, RID, IMDG or IATA, provided the package meets the general packing quality provisions.
- Talc ($Mg_3H_2(SiO_3)_4$) is listed in Annex III of REACH as # Suspected carcinogen: IARC monographs classified the substance as carcinogenic or probably/possibly carcinogenic; carcinogen according to ISSCAN
- Restrictions on use according to Annex XVII to REACH Regulation: Not applicable
- Seveso III Directive (2012/18/EU, Dangerous Substances in Annex I: Class E1 (Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1), LT 100 te, UT 200 te

15.2 Chemical safety assessment

- A REACH chemical safety assessment has been carried out for some of the ingredients in this product
-

SECTION 16: Other information

Information contained in this data sheet is accurate to the best of our knowledge and belief and is given in good faith. It is intended to describe our product from the point of view of safety requirements and is not intended to guarantee any particular properties.

Sources of data: Information from published literature and supplier safety data sheets

Revision No. 7.0.0. Revised October 2021.

Changes made: Revisions to all sections to conform to latest version of REACH Annex II

Training advice

Workers must be informed of the presence of hazardous ingredients and trained in the proper use and handling of this product as required under applicable regulations

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

- Skin Irrit. 2, H315: Classification based on calculation and concentration thresholds
- Eye Irrit. 2, H319: Classification based on calculation and concentration thresholds
- STOT SE 3, H335: Classification based on calculation and concentration thresholds
- Aquatic Acute 1, H400: Classification based on calculation and concentration thresholds
- Aquatic Chronic 1, H410: Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

- H271: May cause fire or explosion; strong oxidiser
 - H302: Harmful if swallowed
 - 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
 - H411: Toxic to aquatic life with long lasting effects
-

Created: 19 October 2021

SECTION 16: Other information (....)

Acronyms

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC₅₀: Effective Concentration, 50%
- GHS: Globally Harmonised System
- IARC: International Agency for Research on Cancer
- LC₅₀: Lethal Concentration, 50%
- LD₅₀: Lethal Dose, 50%
- NOAEC: No observed adverse effect concentration
- NOAEL: No observed adverse effect level
- NOEC: No observed effect concentration
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- SCL: Specific Concentration Limit
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---
