

Revision Date 18/06/2014

Revision 5

Supersedes date 12/06/2012



SAFETY DATA SHEET PERMOST 0.5% DUST POWDER

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name PERMOST 0.5% DUST POWDER
Product No. PERTWE0005DPA

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

Identified uses Biocidal products (e.g. disinfectants, pest control).

1.3. Details of the supplier of the safety data sheet

Supplier Hockley International Ltd
 Hockley House
 3 Longstone Road
 Ashbrook Office Park
 Manchester
 M22 5LB
 TEL: +44 (0) 161 209 7400
 FAX: +44 (0) 161 209 7401
 sds@hockley.co.uk

1.4. Emergency telephone number

+44 (0) 161 209 7400 9am - 5pm GMT

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Not classified.
Environment	Aquatic Acute 1 - H400; Aquatic Chronic 1 - H410

Classification (1999/45/EEC)

N;R50/53.

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

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008



Signal Word

Warning

Hazard Statements

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P273	Avoid release to the environment.
P260	Do not breathe dust.
P264	Wash hands thoroughly after handling.
P332+313	If skin irritation occurs: Get medical advice/attention.
P402+404	Store in a dry place. Store in a closed container.

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P501

Dispose of contents/container in accordance with local regulations.

Supplemental label information

EUH208 Contains permethrin. May produce an allergic reaction.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

TALC (HYDROUS MAGNESIUM SILICATE)	30-60%
CAS-No.: 14807-96-6	EC No.: 238-877-9
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.
MAGNESIUM CARBONATE	30-60%
CAS-No.: 546-93-0	EC No.: 208-915-9
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.
CRYSTALLINE SILICA, QUARTZ	< 1%
CAS-No.: 14808-60-7	EC No.: 238-878-4
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.
CALCIUM SILICATE	< 1%
CAS-No.: 1344-95-2	EC No.: 215-710-8
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.
PERMETHRIN	0.5% min
CAS-No.: 52645-53-1	EC No.: 258-067-9
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Sens. 1 - H317 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) Xn;R20/22. N;R50/53. R43.

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

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

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General information

Remove affected person from source of contamination. CAUTION! First aid personnel must be aware of own risk during rescue! Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Move the exposed person to fresh air at once. Get medical attention. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.

Ingestion

Rinse mouth thoroughly. Get medical attention immediately! If breathing stops, provide artificial respiration.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

Inhalation

Coughing. Difficulty in breathing.

Ingestion

Diarrhoea. Burning sensation. Nausea, vomiting.

Skin contact

Redness. Burning sensation.

Eye contact

Redness. Pain.

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

Treat symptomatically. Antidotes: Atropine for muscarinic manifestations (e.g. salivation, diarrhea). Treat seizures with benzodiazepines.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media appropriate for surrounding materials.

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

Hazardous combustion products

Vapours/gases/fumes of: Hydrogen chloride (HCl). Carbon monoxide (CO). Carbon dioxide (CO₂).

Specific hazards

Dike and collect extinguishing water. Avoid releasing to the environment. Do not discharge into drains, water courses or onto the ground.

5.3. Advice for firefighters

Special Fire Fighting Procedures

In case of fire and/or explosion do not breathe fumes

Protective equipment for fire-fighters

Wear full protective clothing (EN 469). Self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Warn everybody of potential hazards and evacuate if necessary.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Stop leak if possible without risk.

6.3. Methods and material for containment and cleaning up

Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. This material and its container must be disposed of as hazardous waste.

PERMOST 0.5% DUST POWDER**6.4. Reference to other sections**

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Handle and open container with care. Wear protective clothing as described in Section 8 of this safety data sheet. Do not release into the environment. Do not allow to enter drains, sewers or watercourses. Do not eat, drink or smoke when using the product. Wash hands after handling. Remove contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials listed in section 10 of this safety data sheet. Keep out of the reach of children.

7.3. 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**

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
CALCIUM SILICATE	WEL		4 mg/m ³			
CRYSTALLINE SILICA, QUARTZ	WEL		0.1 mg/m ³ resp.dust			
MAGNESIUM CARBONATE	WEL		4 mg/m ³			
TALC (HYDROUS MAGNESIUM SILICATE)	WEL		1 mg/m ³			

WEL = Workplace Exposure Limit.

PERMETHRIN (CAS: 52645-53-1)**Ingredient Comments**

No exposure limits noted for ingredient(s).

CALCIUM SILICATE (CAS: 1344-95-2)**DNEL**

Inhalation.	Local Effects	4	mg/m ³
Inhalation.	Systemic Effects	0.05	mg/m ³

8.2. Exposure controls**Engineering measures**

Provide adequate ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Use respiratory equipment with particle filter, type P2. (EN 140/143)

Hand protection

Wear protective gloves (EN 374).

Eye protection

Avoid contact with eyes. Wear approved safety goggles (EN 166).

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Thermal hazards

No data available.

Environmental Exposure Controls

Do not release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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9.1. Information on basic physical and chemical properties

Appearance Powder, dust
Colour White / off-white.
Odour Characteristic.

Initial boiling point and boiling range (°C)

Not available.

Melting point (°C)

Not available.

Relative density 2.79

Vapour density (air=1)

Not available.

Vapour pressure

Not available.

Evaporation rate

Not available.

pH-Value, Conc. Solution

Not available.

Viscosity

Not available.

Solubility Value (G/100G H₂O@20°C)

Not available.

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not available.

Odour Threshold, Upper

Not available.

Flash point (°C)

Not available.

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%)

Not available.

Flammability Limit - Upper(%)

Not available.

Partition Coefficient

(N-Octanol/Water)

Not relevant

Explosive properties

Not available.

Oxidising properties

Not available.

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

None known.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

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Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Classification based on Regulation (EC) No 1272/2008.

Acute toxicity:

Acute Toxicity (Oral LD50)

Calculation method.

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

Calculation method.

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

Calculation method.

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Calculation method. Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Calculation method. Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Calculation method.

Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Calculation method.

Based on available data the classification criteria are not met.

Carcinogenicity:

Calculation method.

Based on available data the classification criteria are not met.

Reproductive Toxicity:

Calculation method.

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Calculation method.

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

Calculation method.

Based on available data the classification criteria are not met.

Aspiration hazard:

Not relevant, due to the form of the product.

Toxicological information on ingredients.

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PERMETHRIN (CAS: 52645-53-1)

Acute toxicity:

Acute Toxicity (Oral LD50)

1600 mg/kg Rat

Harmful if swallowed.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 24 mg/l (dust/mist) Rat 4 hours

Harmonised classification.

Harmful if inhaled.

Skin Corrosion/Irritation:

Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

May cause an allergic skin reaction.

Germ cell mutagenicity:

Non-genotoxic.

Based on available data the classification criteria are not met.

Carcinogenicity:

No indication of human carcinogenicity.

Based on available data the classification criteria are not met.

Reproductive Toxicity:

No reproductive or developmental effects occurred at non-parentally toxic doses.

Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure:

Based on available data the classification criteria are not met.

Aspiration hazard:

Based on available data the classification criteria are not met.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Classification based on Regulation (EC) No 1272/2008. Very toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

PERMETHRIN (CAS: 52645-53-1)

Acute Toxicity - Fish

LC50 96 hours = 0.62 µg/l Salmo gairdneri (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 96 hours = 0.62 µg/l Daphnia magna

Acute Toxicity - Aquatic Plants

ErC50 96 hours = 92 µg/l Skeletonema costatum

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12.2. Persistence and degradability

Degradability

This product mainly consists of inorganic compounds which are not biodegradable. The remaining substances of the product are expected to be not readily biodegradable.

Ecological information on ingredients.

PERMETHRIN (CAS: 52645-53-1)

Degradability

This product is expected to be not readily biodegradable.

Biodegradation

Soil DT50 < 28 days

12.3. Bioaccumulative potential

Partition coefficient

Not relevant

Ecological information on ingredients.

PERMETHRIN (CAS: 52645-53-1)

Bioaccumulation factor

BCF < 750

Partition coefficient

log Kow 6.5

12.4. Mobility in soil

Ecological information on ingredients.

PERMETHRIN (CAS: 52645-53-1)

Mobility:

Not considered mobile.

Adsorption/Desorption Coefficient

Soil Koc > 5000

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

PERMETHRIN (CAS: 52645-53-1)

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not known.

Ecological information on ingredients.

PERMETHRIN (CAS: 52645-53-1)

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Waste is suitable for incineration. Contact specialist disposal companies. Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

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<u>UN No. (ADR/RID/ADN)</u>	3077
<u>UN No. (IMDG)</u>	3077
<u>UN No. (ICAO)</u>	3077

14.2. UN proper shipping name

<u>Proper Shipping Name</u>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
<u>Proper Shipping Name</u>	(contains Permethrin)

14.3. Transport hazard class(es)

<u>ADR/RID/ADN Class</u>	9
<u>ADR Label No.</u>	9
<u>IMDG Class</u>	9
<u>ICAO Class/Division</u>	9
<u>Transport Labels</u>	

**14.4. Packing group**

<u>ADR/RID/ADN Packing group</u>	III
<u>IMDG Packing group</u>	III
<u>ICAO Packing group</u>	III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

**14.6. Special precautions for user**

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixtureUk Regulatory References

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

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National Regulations

HSE approval no. 6184. This safety data sheet does not form part of the label approved under the Control of Pesticide Regulations 1986. Following the instructions on the pesticide product label for the specified uses should ensure that the product is used safely and efficaciously for those uses.

Health and Environmental Listings

Regulation EC 2037/2000 on substances that deplete the ozone layer. None of the ingredients are listed. Regulation EC 689/2008 concerning the export and import of dangerous chemicals. The following ingredients are listed: Permethrin

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet

PBT - Persistent, bioaccumulative and toxic. vPvB - Very persistent and very bioaccumulative EN - European standard adopted by the European Committee for Standardisation.

Information Sources

International Chemical Safety Card. The International Union of Pure and Applied Chemistry (IUPAC) pesticide properties database - <http://sitem.herts.ac.uk/aeru/iupac/index.htm> United Kingdom National Poison Information Service monograph. International Programme on Chemical Safety (IPCS) Environmental Health Criteria. World Health Organisation (WHO)/Food and Agriculture Organisation of the United Nations (FAO) Joint Meeting on Pesticide Residues monographs and evaluations. Available from www.inchem.org. International Agency for Research on Cancer (IARC) Monographs on the Evaluation of Carcinogenic Risks to Humans - <http://monographs.iarc.fr/>. United States Environmental Protection Agency (EPA) Reregistration Eligibility Decision (RED). Supplier safety data sheet (SDS).

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Risk Phrases In Full

R20/22 Harmful by inhalation and if swallowed.
R43 May cause sensitisation by skin contact.
NC Not classified.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.
H400 Very toxic to aquatic life.

Disclaimer

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