

Diatomaceous Earth specifications

Granulate Diatomite

0-1 mm Granulated Diatomite
1-3 mm Granulated Diatomite
3-6 mm Granulated Diatomite
(reduced dust material)
3-6 mm Granulated Diatomite

Milled Diatomite Milled 200 mesh 98% passing minimum
Milled 325 mesh 98% passing minimum
Milled 400 mesh 98% passing minimum

Chemical analysis

Wt.%

SiO₂ 88-96 (range)
Fe₂O₃ 0.5-1.5 (range)
CaO 0.2-0.5 (range)
Na₂O 0.05-1 (range)

Free silica

%Quartz: <0.5
%Cristobalite: < 0.5
colour: F10 85.5-88.5
Moisture: 8%

Density

Wet bulk: 350gm/cc
Dry bulk: 250gm/cc
Ph(10% Slurry): <8.5
Loss of Ignition: <4.5%
Solubility: 0

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Product Name DIATOMACEOUS EARTH

Synonym (s)

Intended/Possible Product Use Insecticide, Grain Protectant

Company Identification Diatomaceous Earth UK Ltd.

Yarak Lodge, Otter Creek

Taynuilt, Argyll Telephone 01866 822037

Scotland, PA35 1HP

Emergency Telephone

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation

Chemical name CAS-No EINECS/ELINCS Classification Concentration %

* Diatomaceous earth 61790-53-2 231-546-4 - 95

* Silica crystalline quartz 14808-60-7 238-878-4 R48/20 < 0.5

* Cristobalite 14464-46-1 238-435-4 R48/20 < 0.5

Other components are either not CHIP classified or are below the concentration limit for classification Balance

3. HAZARDS IDENTIFICATION

Physical & Chemical:

Health: According to experience, the product is considered to be harmless to health if handled in the correct manner.

Environmental: According to experience, the product is harmless to the environment if handled in the correct manner.

Further Information: * Contains substances with occupational exposure limits

4. FIRST AID MEASURES

General information Blow nose to evacuate dust and swill any residual dust from throat with water.

Inhalation If inhaled, provide fresh air, warmth, rest and SEEK MEDICAL ADVICE.

Skin contact Clean areas of skin affected with soap and plenty of water.

Eye contact In case of contact with eyes, rinse immediately with plenty of water until irritation subsides.

Ingestion If product is swallowed, do NOT induce vomiting. Drink plenty of water and if necessary seek medical advice.

Further information

5. FIRE FIGHTING MEASURES

General hazard The product is non-combustible

Extinguishing media To suit local surroundings (e.g. water spray, carbon dioxide, foam, chemical powder)

Extinguishing media not to be used ---

Special exposure hazards Avoid inhalation of dust.

Protective equipment wear self-contained breathing apparatus.

Further information

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up Take up mechanically (e.g. Sweep or vacuum up) into bins or bags for disposal.

Avoid breathing dust.

Environmental considerations

Further information

7. HANDLING & STORAGE

Advice on safe handling Avoid raising and deposition of dust.

Storage conditions Keep containers tightly closed, cool and dry.

Further information Ensure adequate ventilation.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Dia-Secticide1.txt

Exposure controls Monitoring of the workplace should be considered in accordance with Community Exposure Limits (EH40 etc.) or other data as indicated below.

LTEL (8 hour TWA): ppm 1.2 mg/m3 OES data for Diatomaceous earth natural respirable dust EH40 (2002)

STEL (15min) ppm mg/m3

LTEL (8 hour TWA): ppm 0.3 mg/m3 MEL data for silica crystalline quartz respirable dust EH40 (2002)

STEL (15min) ppm mg/m3

LTEL (8 hour TWA): ppm 0.05 mg/m3 OSHA PEL data for Crystobalite

STEL (15min) ppm mg/m3

Engineering controls Provide powered extraction when ventilation is inadequate.

Personal protection wash hands before breaks and after work.

Wear personal protective equipment appropriate to the task (see below).

Avoid breathing dust.

Eye protection safety goggles with side shields.

Skin protection -

Respiratory protection Respiratory masks to achieve adequate protection factor in respect of exposure limits for the work period concerned. Where approaching the exposure limits shown, masks are generally of the P2 type.

Other protection -

Further Information Personal protective equipment should be selected as appropriate to the nature and aggressiveness of the identified hazard(s). It should be regularly inspected for such things as soundness against leaks, bad fitting and possible chemical penetration. Recommended safe user periods should never be exceeded.

9. PHYSICAL & CHEMICAL PROPERTIES

Physical form Powder

Colour white / pale yellow

Odour

Molecular weight

Molecular formula SiO2 (main component is Amorphous silica dioxide)

pH

Boiling pt / range Decomposes > 2200°C

Melting pt / range appr. 1600°C

General Flammability NON-COMBUSTIBLE

Flash point

Autoflammability

Density Natural Diatoms in bulk: 0.15 - 0.45 g/cc

Explosive limits

Vapour pressure

Vapour Density

Relative Evaporation Rate

(n Butyl Acetate = 1)

Viscosity

Water solubility Insoluble.

Partition coefficient (log P n-octanol / water)

Additional information Material is highly hygroscopic.

10. STABILITY & REACTIVITY

Stability Stable under normal conditions of handling.

Thermal decomposition Data not supplied.

Conditions to avoid Data not supplied.

Material to avoid Data not supplied.

Hazardous reactions None known.

Hazardous decomposition products Data not supplied.

Further information

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD50 rat (oral) > 2.5 g/kg

Dermal compatibility Contact with eyes may cause some irritancy due to scratching of the eyeball.

Mucous membrane compatibility Inhalation of dust can cause transitory irritation of the upper respiratory tract.

Further information Chronic toxicity: Prolonged and repeated exposure by inhalation of dust can cause pulmonary disease.

12. ECOLOGICAL INFORMATION

Acute toxicity NOEL fish > 10 g/l / 96 h
NOEL Daphnia > 1 g/l / 24 h

Degradability Not degradable.

Further information

13. DISPOSAL CONSIDERATIONS

Advice on disposal In accordance with national (i.e. special waste Regulations) and local authority regulations, e.g. special waste or incineration.

Contaminated packaging Treat empty containers in the same way as the product or

if possible wash out thoroughly and recycle.

Further information

14. TRANSPORT INFORMATION

United Nations number The product is not classified for transport

Proper shipping name

Primary hazard class

Secondary hazard class(es)

Packing group

Marine pollutant

Emergency action code

Further information

15. REGULATORY INFORMATION

Classification & labelling The product is categorised in accordance with the Chemicals (Hazard Information and Packaging for Supply) Regulations (CHIP 3).

Include on Product Labelling:- A Safety Data Sheet is available for the professional user on request.

Risk phrases -

Safety phrases S22 Do not breathe dust
S25 Avoid contact with eyes

16. OTHER INFORMATION

General summary

Further information

Sources of data EH40, other databases, and other suppliers' safety data sheets.

Reason for revision

Sections revised

This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific properties.

Data sheet prepared by Environmental Science Limited.
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ChemTrak record: