1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Product information

Product name: Hydrogel

Company: I-Cat Environmental Services Pty Ltd, Unit 33, Scientia Techno Park, Scientia, Pretoria

Tel: +27 (0) 861124228

Emergency: +27 (0) 861124228

Fax: +27 (0) 117046150

2. COMPOSITION / INFORMATION ON INGREDIENTS

Potassium polyacrylate, cross-linked

3. HAZARDS IDENTIFICATION

Spilled product in contact with water or moisture causes surfaces to become extremely slippery. Keep out of reach of children.

4. FIRST AID MEASURES

INHALATION: Remove to fresh air if irritation occurs. Implement appropriate controls to prevent further exposure.

INGESTION: Normally not necessary to induce vomiting. Consult physician if pain or discomfort occurs.

EYES: If dust enters eye, flush with running water to remove particles.

SKIN: Wash affected areas with soap and running water to remove particles.
5. FIRE FIGHTING MEASURES

Specific hazards during fire fighting: carbon monoxide and nitrogen oxides

Special protective equipment for fire fighters: No special equipment required

Suitable extinguishing media: Water mist, foam, carbon dioxide, dry powder

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Spilled product in contact with water or moisture causes surfaces to become extremely slippery.

Environmental precautions: Collect and flush small residuals with much water into the drain for subsequent biological waste effluent treatment.

7. HANDLING & STORAGE

Handling: Avoid breathing the dust. Wash thoroughly with water and soap after handling.

Storage: Store product in original packaging under dry conditions. Preferably room temperature or cooler. Avoid direct sunlight and excess heat.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Components with workplace control parameters

Value: 0.05mg/m³

Remarks: Recommended limit for fine, inhalable polyacrylate dust below 0.01mm particle size. Provisional result of inhalation studies on animals using comparable dusts.

Respiratory Protection: Use respiratory protection when exceeding limit and dust is formed. Ensure sufficient workplace ventilation.

Ventilation: No special requirements under normal use conditions and adequate ventilation.

Eye protection: No special requirements.

Clothing/Gloves: No special requirements.
Respirator: No special requirements under normal use conditions and adequate ventilation.

(Under conditions of frequent use or heavy exposure, respiratory protection may be needed.)

Hygiene measures: Obey reasonable safety precautions and practice good housekeeping.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Form: Powder
Particle size: 0.2mm
Colour: white
Odour: Odourless

Other data
Fusing temperature: Not applicable
Starts to boil at: Not applicable
Flash point: Not applicable
Ignition temperature: Not determined
Upper explosion limit: Not applicable
Vapor pressure: <20hPa at 20.0°C
Bulk density: ≥700kg/m³
Water retention: 1g ≤ 125ml
Ph: ≥7.7 at 1.0 g/l
Viscosity, Dynamic: At 20.0°C/ not applicable
10. STABILITY AND REACTIVITY
Thermal decomposition: >200°C / Stable under usual application conditions

11. TOXICOLOGICAL INFORMATION
Acute Oral Toxicity: LD50 rat / Dose: >5000mg/kg / limit test
Acute Dermal Toxicity: LD50 rat / Dose: >2000mg/kg / limit test
Skin Irritation: Rabbit / method : OECD Nr. 404 – non-irritative to the skin
Eye Irritation: Rabbit / method : OECD Nr. 405 – non-irritative, but could cause damage to the eyes.
Sensitization: Guinea pig Method: OECD Nr. 406 No sensitization
Teratogenicity/ Mutagenicity: No information

12. ECOLOGICAL INFORMATION
Phytopathogens: Below threshold limits.
Ecotoxicity: Non-toxic to the environment.

Elimination information (persistence and degradability) / Biodegradability:
Result: Not rapidly degradable under aerobic conditions
Ciliate toxicity: Tetrahymena pyriformis /EC50 > 6000mg/l
Exposure time: 24:00h
Bacterial toxicity: Ps. Putida / EC50 > 6000mg/l
Exposure time: 24:00h
Method: DEV L8
Fish toxicity: Leuciscus idus / LC50 > 550mg/l
Exposure time: 96:00h
Method: OECD203
Fish toxicity: Danio rerio / LC50 > 4000mg/l

Exposure time: 96:00h

Method: OECD203

13. DISPOSAL CONSIDERATIONS

Product: Dispose of whilst observing local legislation. E.g. in a suitable incineration plant.

Contaminated Packaging: Undamaged packaging may be responsibly reused after proper cleaning.

14. TRANSPORT INFORMATION

Land Transport

ADR: Not dangerous goods

RID: Not dangerous goods

Sea Transport

IMDG: Not dangerous goods

Air Transport

ICAO/IATA: Not dangerous goods

15. REGULATORY INFORMATION

(Labelling according to EEC Directive)

Symbol: None

Risk Phrases (R22): Harmful if swallowed

Safety Phrases (S1/2): Keep locked and out of reach of children.

16. OTHER INFORMATION

Residual Monomers: Acrylic acid < 600ppm.
Department responsible for data sheet: SUQ/Product safety.
Contact person: Leon van Rensburg
+27 (0)82 924 0174

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is intended only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.