

SAFETY DATA SHEET

HM10™

1. IDENTIFICATION

Company name:

fleur ami® GmbH

Emergency phone number:

Tel: +49 (0) 21 54/89 13-0 (within the EEC)

Company Address:

fleur ami® GmbH
Hanns-Martin-Schleyer-Str. 33
47877 Willich, Germany

Product name:

HM10™

Product Code:

Long term fertilizer

Chemical name:

Gemisch aus: Polystyrene Sulphonic/Tertiary
& Quaternary Ammonium Polystyrene

Ionic Form:

Mixed Salts

2. INFORMATION ON INGREDIENTS

Composition:

	Approx WT%	CAS No.
Copolymer:		Crosslinked Polystyrene
Moisture Content:		See Section IX
Residual Hazardous Substances:		None (classified in Annex 1 or having exposure limits)

3. RISK IDENTIFICATION

Health Risk:

The main routes of exposure may be by accidental eye contact and skin contact. Slight to moderate eye irritation is expected. No skin irritation.

Environmental Risk:

Being non volatile and insoluble there is no risk to the air and water compartment. Material expected stable in the ground. No biological degradation observed.

4. FIRST-AID MEASURES

Eye Contact:

Flush eye with water for at least 15 minutes and remove all particles. Consult a physician if irritation persists.

Skin Contact:

Remove the particles and wash with water.

Inhalation:

If particles are inhaled, consult a physician.

Ingestion:

Give 2 glasses of water to drink. However, never give anything to drink to a patient when unconscious.

5. FIRE FIGHTING METHODS

Extinguishing Media:

Foam. CO₂, Dry Chemical

Combustion Products:

Combustion products may include monomers, residual organics, carbon oxides + amines, nitrogen oxides and sulphur oxides. See Section X.

Fire Fighting Procedures:

Wear self-contained breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection:

Floor may be slippery, take care to avoid falls.

Method for Cleaning-up:

Sweep-up and transfer to containers for recovery or disposal, as in Section XIII.

7. STORAGE AND HANDLING

Storage Conditions:

Store between 0 °C and 40 °C. Avoid freezing. Avoid dehydration (when rewetted the resin volume may increase and cause a rupture of the packaging).

Handling Conditions:

Static discharges may accumulate on dry beads.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Control:

Normal ventilation is sufficient to control exposure.

Personal Protection:

Respiratory protection is not required for normal operation. Protective gloves are recommended. Eye protection (safety glasses) are recommended as well as an eyewash facility.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Spherical beads
% Moisture content: 44 - 58
Colour: Beige/Light brown
Specific Gravity: 1.08 - 1.29

Odour: Slight Amine
Solubility in water (g/cc): Slow salt release
Boiling Point, °C: Not applicable.
Autoignition temperature: > 200 °C
Freezing Point, °C: Not applicable.

10. STABILITY AND REACTIVITY

Chemical Stability (conditions to avoid):

Material is stable under normal conditions of use. Anion exchangers may give off vapors of amines at >50 °C. Avoid heat and drying out.

Incompatibility (materials to avoid):

Avoid contact with nitric acid and strong oxidisers. Risk of explosion.

Decomposition Products:

Combustion products may include monomers, residual organics, carbon oxides + amines, nitrogen oxides, or sulphur oxide. Dried resins start to burn strongly at 230 °C.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD50 (rat):	> 5000 mg/kg
Acute Dermal (rabbit):	Not applicable.
Acute Vapour Inhalation:	Not applicable. (rat LC50-4hr-23 °C)
Eye Irritation (rabbit):	Irritant by mechanical action, and also by chemical action.
Skin Irritation (rabbit):	Not Irritant.
Ingestion:	No hazards anticipated if material has not exchanged hazardous substances.

12. ECOTOXICOLOGICAL INFORMATION

No biodegradation observed:WGK: 1 Low ecotoxicity because not soluble in water

13. DISPOSAL CONSIDERATION

The material as supplied is not classified as hazardous waste and can be disposed off by landfill or usual methods for plastics according to local state and national regulations. Controlled incineration is possible (See Section 10).

FRG: Abfallnummernschlüssel:
57124 resins from water and foodstuff treatment.

FRG: Abfallnummernschlüssel:
57125 resins with specific contaminants from
chemical processes, metal industry and effluents treatment.

14. TRANSPORT INFORMATION

Name:	see Section 1
Code:	see Section 1
Transport:	Not classified
Containers:	Ion Exchange Resins

15. REGULARITY INFORMATION

Labelling:
Xi - IRRITANT - R36, S26-39.

Note:

Industrial grade products are not intended for use in analytical and medical applications without extensive purification.