



MATERIAL HEALTH & SAFETY DATA SHEET

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product trade names: 'Broadleaf P4' & 'Broadleaf Root Dip.'

Supplier:

- Agricultural Polymers International Ltd
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2. PRODUCT CHEMICAL TYPE & DESCRIPTION

Synthetic, high molecular weight, X-linked superabsorbent polymer. White, free-flowing, angular granules. Broadleaf P4: 80% in the size range 500 -2800 μ . Root Dip: 80% <200 μ .

3. HAZARD INFORMATION

Product that has been spilt and becomes wet can present a hazardous, slippery surface.

4. FIRST AID PROCEDURES

Inhalation

There are no hazards that require special first aid procedures.

Skin contact

There are no hazards that require special first aid procedures.

Eye contact

Rinse the affected eye with copious amounts of water for several minutes to ensure all product is removed. Consult a physician if irritation persists.

Ingestion

Rinse mouth with water but do not swallow; emetics are not necessary; the product is not considered toxic based on laboratory studies on animals.

5. FIRE-FIGHTING PROCEDURES

Extinguishing materials Water, foam, carbon dioxide, dry powder.

Extinguishing materials to avoid None.

Precautions Product that has been spilt and becomes wet can present a hazardous, slippery surface.

Protective equipment for fire-fighters No special equipment needed.

6. ACCIDENTAL SPILLAGE PRECAUTIONS

Personal precautions None needed

Environmental None needed

Cleaning-up procedures Spillages should be swept, vacuumed or shovelled-up dry. Spillages of the hydrated gel should be similarly treated and final traces flushed away with water.

7. HANDLING & STORAGE

Handling Products are non-toxic but normal industrial hygiene precautions should be observed during handling. Do not breathe dust. Wash hands at start of breaks and close of shift.

Storage Store under cool, dry conditions, 0-30°C, away from direct contact with sunlight

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Occupational Exposure Limits: The EDANA Industrial Hygiene Guideline is 0.05 mg/m³ respirable superabsorbent polymer dust (respirable dust is <10µ).

Personal protection equipment

- **Respiratory protection** In confined spaces respiratory (dust) masks and goggles should be worn, particularly if dust concentration is more than 10mg/m³.
- **Hand protection** None needed but rubber gloves if desired.
- **Eye protection** Safety goggles when bulk-handling. Contact lenses should not be worn.
- **Skin and body protection** No special protective clothing is required.
- **Hygiene measures** Wash hands at breaks and close of shifts.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Granules
Colour	White
Odour	None
pH	Neutral
Melting point (°C)	Not applicable
Flashpoint (°C)	Not applicable
Auto ignition point (°C)	Not applicable
Vapour pressure (mm Hg)	Not applicable
Bulk density	0.76 - 0.8 approx.
Solubility	Insoluble in water, acetone, ether and most other organic solvents.

10. STABILITY AND REACTIVITY

Stability	Very stress resistant and will not powder during normal handling.
Materials to avoid	Oxidising agents may cause exothermic reactions.
Hazardous decomposition	Anoxic thermic decomposition conditions may produce HCN.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

- Oral LD50/oral/rat >8200mg/kg
- Dermal Non-toxic.

Irritation

- Skin Non-irritant.
- Eyes Draize-testing showed no corneal effects. Slight transient conjunctival effect.

Sensitisation

Non-sensitising to humans and guinea pigs.

Chronic Toxicity

Two year feeding trials with rats and dogs using anionic polyacrylamide containing 0.07% residual acrylamide monomer have shown unequivocal "no ill effect" at levels of 1% w/w in the diet of rats and 5-6% in the diet of dogs. At dietary concentrations up to 10% w/w no adverse reactions occurred in either species other than those attributable indirectly to the large, hydrophilic, non-nutritive bulkiness of the materials. Additional C14 radiotracer studies with rats have shown no absorption of polyacrylamide through the walls of the intestinal tract.

12. ECOLOGICAL INFORMATION

Eco-toxicity	No damage to the environment is likely in normal usage.
Persistence/degradability	Biodegradable over several years leaving no toxic residues.

13. DISPOSAL CONSIDERATIONS

Waste from residues/unused products	In accordance with statutory requirements.
Used packaging	Can be incinerated or landfilled.

14. TRANSPORT INFORMATION

Not hazardous for transport.

15. REGULATORY INFORMATION

These products are nonhazardous and require no special labelling to meet EC directives.

The details provided in this document conform to EC requirements. Users of these products should check that the information provided is serviceable for their requirements and contact us if further details are required.

Agricultural Polymers International Limited make no warranty and assume no responsibility for the accuracy and completeness of this information.

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