Material Safety Data Sheet
Protanal® IN 1816

SDS # : 2217300-B
Revision Date: 2012-03-12
Version 2

FMC BioPolymer

This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

Product name **Protanal® IN 1816**

Synonyms Alginic acid, ammonium salt

Recommended use Industrial.

Manufacturer

FMC BioPolymer
1735 Market Street
Philadelphia, PA 19103
(800) 526-3649
msdsinfo@fmc.com

Emergency telephone number

(207) 594-3200 (FMC Plant - Rockland, ME)
(303) 595-9048 (Medical - U.S. - Call Collect)

For leak, fire, spill, or accident emergencies, call:
(800) 494-9300 (CHEMTREC - U.S.A. & Canada)
(703) 527-3887 (CHEMTREC - all other countries)

2. Hazards identification

Emergency Overview

Powder becomes slippery when wet. Accumulation of overhead settled dust may form explosive concentration in air when disturbed and dispersed.

Appearance free flowing powder

Physical state solid

Odor almost odorless

Eyes May cause slight irritation.
Skin Prolonged or repeated contact may dry skin and cause irritation.
Inhalation May cause irritation of respiratory tract. Aspiration or inhalation of alginates could cause chemical pneumonitis.
Ingestion None under normal use condtions. May cause gastrointestinal discomfort if consumed in large amounts.
Chronic effects Animal studies investigating some ingredients found in this product have caused chronic target organ effects .

3. Composition/information on ingredients

Hazardous

Chemical Name	CAS-No
Ammonium alginate	9005-34-9

4. First aid measures

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin contact Wash with water and soap as a precaution.

Inhalation Move to fresh air. If breathing is irregular or stopped, administer artificial respiration. Consult a physician.

Ingestion Never give anything by mouth to an unconscious person. Drink plenty of water. Get medical attention immediately if symptoms occur.

Notes to physician Treat symptomatically. Aspiration or inhalation of this product could cause chemical pneumonitis.

Protection of first-aiders Use personal protective equipment.

5. Fire-fighting measures

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical Dry or powdered ingredients are combustible. Dispersal of finely divided dust from products into air may form mixtures that are ignitable and explosive. Minimize airborne dust generation and eliminate sources of ignition.

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

NFPA

Health Hazard	1
Flammability	1
Stability	0
Special Hazards	-

6. Accidental release measures

Personal precautions Powder becomes slippery when wet. For personal protection see section 8.

Methods for containment Maintain good housekeeping practices to avoid accumulation of settled dust, especially on overhead surfaces.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal.

7. Handling and storage

Handling Avoid dust formation in confined areas. Wear personal protective equipment. In case of insufficient ventilation, wear suitable respiratory equipment. Refer to Section 8.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat.

8. Exposure controls/personal protection

Exposure guidelines

Occupational exposure controls

Engineering measures Use with local exhaust ventilation.

Personal Protective Equipment

General Information If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers.

Respiratory protection In case of insufficient ventilation wear suitable respiratory equipment. Local nuisance dust standards apply.

Eye/face protection Safety glasses.

Skin and body protection No special precautions required.

Hand protection No special precautions required.

Hygiene measures When using, do not eat, drink or smoke. Wear suitable gloves and eye/face protection. Wash hands before breaks and at the end of workday. Provide regular cleaning of equipment, work area and clothing. Avoid breathing vapors, mist or gas.

9. Physical and chemical properties

Appearance	free flowing powder
Color	White to yellowish brown
Physical state	solid
Odor	almost odorless
Odor Threshold	No information available.
pH	5.0 -6.5 (1% aqueous solution)
Melting Point/Range	not determined
Freezing point	No information available
Boiling Point/Range	not applicable
Flash Point	not applicable
Evaporation rate	not applicable
Autoignition Temperature	> 200 °C / > 392 °F
Vapor pressure	not applicable
Vapor density	No information available
Density	No information available
Specific Gravity	No information available
Bulk density	No information available. No information available
Water solubility	Slowly soluble, forming a viscous, colloidal solution
Percent volatile	No information available
Partition coefficient:	not applicable
Viscosity	No information available
Oxidizing properties	not applicable

10. Stability and reactivity

Stability	Stable
Conditions to avoid	Heat Humid air
Materials to avoid	Strong oxidizing agents
Hazardous decomposition products	None known
Hazardous polymerization	Hazardous polymerization does not occur
Hazardous reactions	None under normal processing.

11. Toxicological information

Skin contact	Does not pose a potential of skin irritation and sensitization.
Eye contact	Contact with eyes may cause irritation.
Inhalation	May cause irritation of respiratory tract. Inhalation may cause chemical pneumonitis.
Ingestion	Low order of toxicity based on components. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration may cause chemical pneumonitis.
LD50 Oral	> 5000 mg/kg

Chronic Toxicity

Chronic Toxicity	Animal studies investigating some ingredients found in this product have caused chronic target organ effects .
Carcinogenicity	Contains no ingredient listed as a carcinogen.

12. Ecological information

Ecotoxicity
Not expected to have significant environmental effects Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

Persistence and degradability	Product is biodegradable.
Bioaccumulation	Bioaccumulation is unlikely.
Mobility	No information available.
Other adverse effects	None known

13. Disposal considerations

Waste disposal methods	This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	not regulated

TDG not regulated

ICAO/IATA not regulated

IMDG/IMO not regulated

15. Regulatory information

International Inventories

Chemical Name	TSCA Inventory (United States of America)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	IECSC (China)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)	NZIoC (New Zealand)
Ammonium alginate 9005-34-9	X	X	-	X	X	X	X	X	X

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	no
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

International Regulations

Mexico - Grade Minimum risk, Grade 0

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

16. Other information

HMIS	Health Hazard 1	Flammability 1	Stability 0	Special precautions -

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

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Prepared By

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End of Material Safety Data Sheet