



### SECTION 1. IDENTIFICATION

**Product Name** AscendFloc-A245

**Product Identifier** Anionic Polyacrylamide

**Other means of Identification** PAM

**CAS Number** 9003 05-8

**Recommended use** For industrial use only.

**Restrictions on use** For industrial use only.

**Supplier Identifier:** Prairie Mud Service 738-6th St. Estevan, Saskatchewan S4A 1A4

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### SECTION 2. HAZARDS IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHIMIS 2015) and the US Hazard Communication Standard (HCS 2012).

**Classification**

Combustible dust – Category 1



**Label Elements**

Signal Word: Warning

Hazard Statement(s): May form combustible dust concentrations in air.

**Other Hazards**

Aqueous solutions or powders that become wet will render surfaces extremely slippery.

### SECTION 3. COMPOSITION/INFORMATION OR INGREDIENTS

**Chemical Name:** Anionic Polyacrylamide

**CAS No. :** 9003 05-8

**% Composition:** 85-95

**Other Identifiers:** None

### SECTION 4. FIRST AID MEASURES

**First-aid Measures**

**Inhalation:** If breathed in, move person into fresh air. If breathing becomes difficult, provide the victim with oxygen. If not breathing, give artificial respiration. Get medical attention if you feel unwell or are concerned.

**Skin Contact:** Avoid direct contact. Wear chemical protective clothing in necessary. Take off and clean contaminated clothing, shoes, and leather goods (e.g. watchbands, belts). Wash affected areas thoroughly with soap and lukewarm water, gently flowing water for 5 minutes. Seek medical attention if unwell or concerned.

**Eye Contact:** Avoid direct contact. Wear chemical protective gloves if necessary. Quickly and gently blot or brush chemical off the face. Immediately wash affected eye(s) with lukewarm,



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gently flowing water for at least 15 minutes while holding eyelid(s) held open. If eye irritation persists, get medical advice or attention.

**Ingestion:** Immediately rinse mouth with water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. If convulsion does occur, lay victim on the side. Do not leave victim unattended. Vomiting may occur spontaneously. There is risk of the product entering the lungs or vomiting after ingestion. Seek medical attention if you feel unwell or are concerned.

**First aid Comments:** Get medical advice or attention if you feel unwell or are concerned.

### **Most Important Symptoms and Effects, Acute and Delayed**

If in the eyes, product may cause slight irritation as a "foreign object". Tearing, blinking and mild temporary pain may occur as particles are rinsed from the eye by tears. If inhaled, product can irritate the nose and throat.

### **Immediate Medical Attention and Special Treatment**

**Target Organs:** Eyes, respiratory system

**Special Instructions:** Not applicable

**Medical Conditions Aggravated by Exposure:** Eye conditions, respiratory conditions.

## **SECTION 5. FIRE FIGHTING MEASURES**

### **Extinguishing Media**

**Suitable Extinguishing Media:** For small fires, carbon dioxide or dry chemical powder can be used. For larger fires, use water spray or alcohol-resistant foam.

**Unsuitable Extinguishing Media:** None known

**Specific Hazards Arising from the Product:** Combustible dust. May form combustible dust concentration in air. During a fire or exposure to extreme heats, product can be very toxic and/or flammable gases such as hydrogen cyanide, carbon dioxide, carbon monoxide, hydrogen, as well as corrosive and toxic gasses such as ammonia or nitrogen oxides are released. Restrict pedestrian and vehicular traffic in areas where slip hazard may exist.

**Special Protective Equipment and Precautions for Fire-fighters:** Aqueous solutions or powders that become wet will render surfaces extremely slippery. Before entry, especially into confined areas, use an appropriate monitor to check for a flammable or explosive atmosphere. Product can produce a dust explosion hazard. Use a water spray or a fog to prevent dust formation and minimize risk of explosion. Wear self-contained breathing apparatus and protective suit. Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment, and Emergency Procedures:** Avoid dust formation. Avoid breathing vapors, mist, or gas. Avoid direct contact with eyes and skin. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

**Environmental Precautions:** Do not allow into any sewer, on the ground or into any waterway. If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Minimize the use of water to prevent environmental contamination.

**Methods and Materials For Containment and Cleaning Up:** Review Section 7 (Handling) of this safety data sheet before proceeding with cleanup. Mark off spill area, and avoid direct water at spill or source. Avoid generating dust. Soak up with an inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect using a scoop, shovel, or approved HEPA vacuum. Place contaminated product in a suitable container for disposal. Never return spilled material to the original container for re-use. After bulk powder removal, flush away traces



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with plenty of water. Recover cleaning water for subsequent disposal. Decontaminate tools, equipment, and personal protective equipment in a segregated area.

**Other Information:** Aqueous solutions, or powders that become wet, will render surfaces extremely slippery. Report spills to local health, safety, and environmental authorities, as required.

### **SECTION 7. HANDLING AND STORAGE**

**Precautions for Safe Handling:** Aqueous solutions, or powders that become wet, will render surfaces extremely slippery. Only use where there is adequate ventilation. Avoid generating dusts. Prevent uncontrolled release of product. Avoid release to the environment. Take all necessary measures to avoid accidental discharge of spilled product into drains and waterways. Immediately report leaks, spills or failures of the safety equipment (e.g. ventilation system). Wear personal protective equipment to avoid direct contact with this chemical. It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Thoroughly clean clothing, shoes and leather goods before reuse or dispose of safely. Properly dispose of any contaminated items, including shoes that cannot be decontaminated. DO NOT re-use. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces, and static discharge. Post “No Smoking” signs. Do not dry sweep. Wet the product or use explosion-proof HEPA vacuum.

**Conditions for Safe Storage:** Store product in cool, dry, well-ventilated area, out of direct sunlight, away from heat and ignition sources, separate from incompatible materials such as those specified in Section 10 of this safety data sheet. Avoid moisture. Prevent dust build-up on ALL surfaces. Avoid dry-sweeping, and clean surfaces frequently. If a vacuum should be used, ensure that it is an explosion-proof HEPA vacuum with a high efficiency filter. Ensure to comply with all applicable health and safety regulations, fire and building codes. Keep container tightly closed at all times, and do not freeze product.

### **SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION**

#### **Control Parameters**

**Time – Weighted Average (TLV-TWA):** Not established

**Time – Weighted Average (PEL-TWA):** Not established

**Appropriate Engineering Controls:** General ventilation should be adequate. Use local exhaust ventilation when general ventilation is not adequate to control powder amounts in the air. Avoid breathing vapors and mists. Provide eyewash and safety shower if contact or splash hazard exists. Select additional protective equipment based upon potential for exposure.

#### **Personal Protective Equipment:**

**Respiratory:** Respiratory protection is not required. If protection from nuisance levels of dusts is desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye/Face:** Wear chemical safety goggles with side shields or face shield when contact is possible.

**Clothing:** Wear appropriate protective clothing.

**Skin:** Skin protection is not required if used as directed. General, leather, work gloves can be used.

**Other Protect:** No smoking, drinking and eating at working site. Wash hands thoroughly after handling.



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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Free flowing powder

**Color:** White

**Odor:** Odorless

**Odor Threshold:** Not applicable

**pH Value:** 6.5 – 6.8

**Melting Point/Freezing Point:** 170°C

**Initial Boiling Point/Range:** Not available

**Flash Point (Closed Cup):** Not available

**Evaporation Rate:** Not available

**Flammability (solid, gas):** Not applicable (liquid)

**Upper/Lower Flammability or Explosive Limit:** Not available (upper); Not available (lower)

**Vapour Pressure:** Not available

**Vapour Density (air = 1):** Not available

**Solubility in water:** 10-50g/100mL for linear polymer. <1g/100mL highly branched or crosslinked polymer.

**Solubility in other liquids:** Linear polymer is soluble in ethylene glycol, formamide, ethanolamine, dimethyl sulfoxide, and morpholine. Insoluble in ketones, hydrocarbons, ethers, and alcohols.

**Partition Coefficient, n-Octanol/Water (Log K<sub>ow</sub>):** Not available

**Density:** Not available

**Relative Density:** Not available

**Auto-ignition Temperature:** Not available

**Decomposition Temperature:** >160°C (320°F)

**Viscosity:** Not Available

#### Other Information

**Physical State:** Solid

**Molecular Formula:** (C<sub>3</sub>H<sub>5</sub>NO)<sub>n</sub>

**Molecular Weight:** 12 – 16 million

**Charge Density:** 5 – 15%

**Bulk Density:** Not available

### SECTION 10. REACTIVITY DATA

**Reactivity:** Not reactive under normal conditions of use.

**Chemical Stability:** Normally stable. Hydrolyzes slowly in water and reacts slowly with air. Shelf life for the dry solid is approximately one year.

**Hazardous Polymerization:** Will not occur.

**Possibility of Hazardous Reactions:** Decomposes above 160°C. May start to degrade at lower temperatures when heated for prolonged periods of time.

**Conditions to Avoid:** Generation of dust, incompatible materials, strong oxidizing agents.

**Incompatible Materials:** Strong oxidizers such as liquid chlorine, enriched gaseous or liquid oxygen, and sodium or calcium hypochlorite.

**Hazardous Decomposition Products:** Thermal degradation above 160°C causes structural changed in the polymer such as imidization and dehydration. Above 210°C, product may release acrylamide, acrylic acid (if moisture is present), ammonia, formaldehyde, hydrocarbons, etc.



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Above 300°C, releases hydrogen gas, carbon monoxide, carbon dioxide, ammonia, and nitrogen oxides (in presence or air/oxygen gas). Decomposes slowly in water to form acrylamide (transient species) and acrylic acid.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

**Likely Routes of Exposure:** Skin contact; eye contact; inhalation; ingestion.

**Acute toxicity**

Polyacrylamide: Rat Oral LD50: >1000mg/kg

Mouse Oral LD50: 12950 mg/kg

**Skin corrosion/irritation:** Not a skin irritant.

**Serious eye damage/irritation:** May cause slight and temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.

**STOT (Specific Target Organ Toxicity) – Single Exposure**

**Inhalation:** Inhalation of dusts or mists may cause irritation to the respiratory system.

**Ingestion:** May be harmful if swallowed.

**Aspiration Hazard:** No information was located.

**STOT (Specific Target Organ Toxicity)**

**Repeated Exposure:** A two-year feeding study on rats did not reveal adverse health effects. A one-year feeding study on dogs did not reveal adverse health effects.

**Respiratory and/or Skin Sensitization:** Not known to be a skin sensitizer. Not known to be respiratory sensitization.

**Carcinogenicity:** Polyacrylamide

**IARC:** Not listed

**ACGIH®:** Not designated

**NTP:** Not listed

**OSHA:** Not listed

**Reproductive Toxicity**

**Development of Offspring:** Not available

**Sexual Function and Fertility:** Not available

**Effects on or via Lactation:** Not available

**Germ Cell Mutagenicity:** Not available

**Interactive Effects:** Not available

### **SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** The product is rapidly eliminated from the aquatic medium through reversible adsorption onto suspended matter and dissolved organics.

**Acute Aquatic Toxicity:** Polyacrylamide

LC50 Fish: Not Available

EC50 Crustacea: > 100 mg/L Daphnia magna (water flea); 48hr

ErC50 Aquatic Plants: Not available

ErC50 Algae: Not available

**Persistence and degradability:** Does not biodegrade readily.

**Bioaccumulative potential:** This product and its byproducts are not known to bioaccumulate.

**Mobility in soil:** Not available.

**Other Adverse Effects:** There is no other information available.



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### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Appropriate Method of Disposal of substance:** Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. The required hazard evaluation of the waste and compliance with the applicable hazardous waste laws are the responsibility of the user. Store product for disposal as described under Storage in Section 7 of this safety data sheet. Dispose of or recycle empty containers through an approved waste management facility. Be sure to observe all federal, provincial, state, and local environmental regulations.

### **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations. Not regulated under IATA regulations.

**DOT:** Not Regulated.

**RID/ADR:** This substance is considered to be non-hazardous for transport.

**IATA:** Not Regulated.

**IMO:** This substance is considered to be non-hazardous for sea transport.

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:** Not applicable

### **SECTION 15. REGULATORY INFORMATION**

#### **Safety, Health and Environmental Regulations**

##### **Canada**

##### **Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)**

Listed on the TSCA Inventory.

##### **USA**

##### **Toxic Substances Control Act (TSCA) Section 8(b)**

Listed on the TSCA Inventory.

##### **Additional USA Regulatory Lists**

SARA Title III – Section 302: Not listed

SARA Title III – Section 313: Not listed

Massachusetts Right to Know: Not listed

Pennsylvania Right to Know: 2-Propenamide, homopolymer

New Jersey Right to Know: 2-Propenamide, homopolymer

California Proposition 65: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

##### **EU Additional Classification:**

Symbol of Danger: Xn

Indication of Danger: Harmful

R 22

Risk Statements: Harmful if swallowed.

S 2 26

Safety Statements: Keep out of the reach of children. In case of contact with eyes, rinse



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Immediately with plenty of water and seek medical advice.

## **SECTION 16. OTHER INFORMATION**

**Other Information:** This information is furnished without warranty, either expressed or implied, except that is accurate to the best knowledge of Prairie Mud Service. The data on this SDS relates only to the specific material described herein. Regulatory requirements are subject to change and may vary by jurisdiction; it is the reader's responsibility to confirm the applicable regulations in their jurisdiction and maintain full compliance. Prairie Mud Service Inc. assumes no legal responsibility for the use or reliance on the data enclosed herein.

**Prepared by:** Prairie Mud Service

**References:** CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS)

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