This Appendix provides a generic template that can be used to develop an OSHA compliant SDS for Flue Gas Desulfurization (FGD) gypsum.

Comments have been included within the template to assist American Coal Ash Association (ACAA) members in populating the SDS appropriately. In general, items highlighted in yellow will require additional input from the SDS developer to identify/include the appropriate information. Other required information for populating the template may originate from the manufacturer/distributer or the FGD gypsum. The SDS Guidance Document can be used as a source of required information if it is not available here.

Note: Delete highlights and comments upon generation of an SDS using the template. Adjust *Page Breaks* as necessary to keep section, subsection or tabular information together.

**Safety Data Sheet**

|  |
| --- |
| **Section 1****Identification of the Substance and of the Supplier** |

## 1.1 Product Identifier

|  |  |
| --- | --- |
| **Product Name/Identification:** | INSERT |
| **Synonyms:** | LIST HERE, Delete row if not applicable |
| **Product Code:** | INSERT or enter Not Applicable |
| **Formula:** | UVCB Substance |

## 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advices Against

|  |  |
| --- | --- |
| **Relevant Identified Uses:** | Component of building products such as drywall, cement additives and plaster, as a set retardant and grinding aid in cement, or as an agricultural additive. |
| **Uses Advised Against:** | None known |

## 1.3 Details of the Supplier of the SDS

|  |  |
| --- | --- |
| **Manufacturer/Supplier:** | INSERT |
| **Street Address:** | INSERT |
| **City, State and Zip Code:** | INSERT |
| **Customer Service Telephone:** | INSERT |
| **E-mail Address:** | OPTIONAL, Insert if desired, otherwise delete row |

## 1.4 Emergency Telephone Number

|  |  |
| --- | --- |
| **Emergency Phone Number:** | INSERT |
| **Hours Available:** | INSERT  |

|  |
| --- |
| **Section 2****Hazards Identification** |

## 2.1 Classification of the Substance

**GHS Classification(s) according to OSHA Hazard Communication Standard (29 CFR 1910.1200):**

Insert applicable classifications.

For FGD Gypsum Composition 1:

* STOT-SE Category 3 (Respiratory Irritation)
* STOT-RE Category 1 (Lungs)
* Carcinogen Category 1A

For FGD Gypsum Composition 2:

* STOT-SE Category 3 (Respiratory Irritation)

For FGD Gypsum Composition 3:

* STOT-SE Category 3 (Respiratory Irritation)
* STOT-RE Category 1 (Lungs)

## 2.2 Label Elements

For FGD Gypsum Composition 1:

* STOT-SE Category 3 (Respiratory Irritation)
* STOT-RE Category 1 (Lungs)
* Carcinogen Category 1A

|  |
| --- |
| **Labelling according to 29 CFR 1910.1200 Appendices A, B and C\*** |
| **Hazard Pictogram(s):** | health hazard pictogram |
| **Signal Word:** | Danger |
| **Hazard Statement(s):** | May cause respiratory irritation.Causes damage to lungs after repeated/prolonged exposure via inhalation. May cause cancer of the lungs. |
| **Precautionary Statement(s):** | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.Do not breathe dust.Wear protective gloves/protective clothing/eye protection/face protection.Do not eat drink or smoke when using this product.Use outdoors or in a well-ventilated area.If inhaled: Remove to fresh air and keep comfortable for breathing.Get medical advice/attention if you feel unwell.Store in a secure area.Dispose of product in accordance with local/national regulations. |

For FGD Gypsum Composition 2:

* STOT-SE Category 3 (Respiratory Irritation)

| **Labelling according to 29 CFR 1910.1200 Appendices A, B and C\***  |
| --- |
| **Hazard Pictogram(s):** |  |
| **Signal Word:** | Warning |
| **Hazard Statement(s):** | May cause respiratory irritation.  |
| **Precautionary Statement(s):** | *Do not breathe dust.**Use outdoors or in a well-ventilated area.**If inhaled: Remove to fresh air and keep comfortable for breathing.**Get medical advice/attention if you feel unwell.**Store in a secure area.**Dispose of product in accordance with local/national regulations.* |

For FGD Gypsum Composition 3:

* STOT-SE Category 3 (Respiratory Irritation)
* Carcinogen Category 1A

|  |
| --- |
| **Labelling according to 29 CFR 1910.1200 Appendices A, B and C\*** |
| **Hazard Pictogram(s):** | health hazard pictogram |
| **Signal Word:** | Danger |
| **Hazard Statement(s):** | May cause respiratory irritation.May cause cancer of the lungs. |
| **Precautionary Statement(s):** | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.Wear protective gloves/protective clothing/eye protection/face protection.Do not breathe dust.Use outdoors or in a well-ventilated area.If inhaled: Remove to fresh air and keep comfortable for breathing.Get medical advice/attention if you feel unwell.Store in a secure area.Dispose of product in accordance with local/national regulations. |

## 2.3 Other Hazards

|  |
| --- |
| **Listed Carcinogens:*** **For FGD Gypsum Composition 1**

*Respirable Crystalline Silica* |
|  |
| *IARC:* | *Yes* | *NTP:* | *Yes* | *OSHA:* | *Yes* | *Other (ACGIH):*  |  *Yes* |

* **For FGD Gypsum Composition 2:**

*None Known*

* **For FGD Gypsum Composition 3**

|  |
| --- |
| *Respirable Crystalline Silica* |
|  |
| *IARC:* | *Yes* | *NTP:* | *Yes* | *OSHA:* | *Yes* | *Other (ACGIH):* |  *Yes* |

|  |
| --- |
| **Section 3****Composition/Information on Ingredients/Impurities** |

|  |  |  |  |
| --- | --- | --- | --- |
| ***Substance*** | ***CAS No.***  | ***Percentage (%)*** | ***GHS Classification*** |
| *Calcium sulfate, dihydrate* | *10104-14-1* | *Include %* | *Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation)* |
| *Crystalline silica* | *14808-60-7* | *See Note 1* | *Specific Target Organ Toxicity – Repeated Exposure - Category 1 (Lung)**Carcinogen Category 1A* |
| *Respirable crystalline silica (RCS)* | *14808-60-7* | *≥0.1%; See Note 2* | *Specific Target Organ Toxicity – Repeated Exposure Category 1 (Lungs)* |
| *Fly Ash* | *68131-74-8* | *If >1%* | *Specific Target Organ Toxicity – Single Exposure Category 3 (Respiratory Irritation)* |

1. *Report the level of crystalline silica in the product if the level of RCS has not been determined, or is present at or above 0.1%. If the level of RCS has been determined this information is not required; delete the crystalline silica row.*
2. *Report the level of RCS if known. If the RCS level has not been determined, footnote the crystalline silica value to indicate that the respirable portion of the substance in the FGD gypsum has not been determined; delete the RCS row.*

|  |
| --- |
| **Section 4****First Aid Measures** |

## 4.1 Description of First Aid Measures

|  |  |
| --- | --- |
| **Inhalation:** | If product is inhaled and irritation of the nose or coughing occurs, remove person to fresh air. Get medical advice/attention if respiratory symptoms persist. |
| **Skin Contact:** | If skin exposure occurs, wash with soap and water. |
| **Eye Contact:** | If product gets into the eye, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Seek medical attention/advice if irritation occurs or persists. |
| **Ingestion:** | No specific first aid measures are required. |

## 4.2 Most Important Health Effects, Both Acute and Delayed

* **For FGD Gypsum Composition 1 and 3:**

**Acute effects:** Exposure to FGD gypsum dust may cause respiratory irritation. Acute exposure can dry and irritate the skin and cause dermatitis or eye irritation through mechanical abrasion.

**Chronic effects:** Chronic exposure to FGD gypsum may cause lung damage from repeated exposure. Prolonged inhalation of dusts containing respirable crystalline silica above certain concentrations may cause lung disease (silicosis) and lung cancer.

* **For FGD Gypsum Composition 2:**

**Acute Effects**

Direct exposure may cause respiratory irritation, eye irritation and skin irritation. Acute exposure to FGD gypsum dust can dry and irritate the skin and cause dermatitis or eye irritation through mechanical abrasion.

**Chronic Effects**

None known

## 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Seek first aid or call a doctor or Poison Control Center if contact with eyes occurs and irritation remains after rinsing. Get medical advice if inhalation of dust occurs and respiratory symptoms persist.

|  |
| --- |
| **Section 5****Firefighting Measures** |

## 5.1 Extinguishing Media

|  |  |
| --- | --- |
| **Suitable Extinguishing Media:** | Product is not flammable. Use extinguishing media appropriate for surrounding fire. |
| **Unsuitable Extinguishing Media:** | Not applicable, the product is not flammable. |

## 5.2 Special Hazards Arising from the Substance or Mixture

|  |  |
| --- | --- |
| **Hazardous Combustion Products:** | Above 1450oC (~2600oF), gypsum decomposes to calcium oxide and sulfur dioxide.  |

## 5.3 Advice for Firefighters

|  |  |
| --- | --- |
| **Special Protective Equipment and Precautions for Firefighters:** | As with any fire, wear self-contained breathing apparatus (NIOSH approved or equivalent) and full protective gear. |

|  |
| --- |
| **Section 6****Accidental Release Measures** |

## 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

|  |  |
| --- | --- |
| **Personal precautions/Protective equipment:** | See Section 8.3 Individual Protective Measures. For concentrations exceeding Occupational Exposure Levels (OELs), use a self-contained breathing apparatus (SCBA).  |
| **Emergency procedures:** | Use scooping, water spraying/flushing/misting or ventilated vacuum cleaning systems to clean up spills. Do not use pressurized air. |

## 6.2 Environmental Precautions

|  |  |
| --- | --- |
| **Environmental precautions:** | Prevent contamination of drains or waterways and dispose according to local and national regulations. |

## 6.3 Methods and Material for Containment and Cleaning Up

|  |  |
| --- | --- |
| **Methods and materials for containment and cleaning up:** | Do not use brooms or compressed air to clean surfaces. Use dust collection vacuum and extraction systems. *Avoid creating airborne dust during clean-up.*Large spills of dry product should be removed by a vacuum system. Dampened material should be removed by mechanical means and recycled or disposed of according to local and national regulations. |

See Sections 8 for additional information on exposure controls.

|  |
| --- |
| **Section 7****Handling and Storage** |

## 7.1 Precautions for Safe Handling

Practice good housekeeping. Use adequate exhaust ventilation, dust collection and/or water mist to maintain airborne dust concentrations below permissible exposure limits, respirable crystalline silica dust may be in the air without a visible dust cloud.

Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain and test ventilation and dust collection equipment. In cases of insufficient ventilation, wear a NIOSH approved respirator for silica dust when handling or disposing dust from this product. Avoid contact with skin and eyes. Wash or vacuum clothing that has become dusty. Avoid eating, smoking, or drinking while handling the material.

## 7.2 Conditions for Safe Storage, Including any Incompatibilities

Minimize dust produced during loading and unloading.

|  |
| --- |
| **Section 8****Exposure Controls/Personal Protection** |

## 8.1 Control Parameters

|  |
| --- |
| **OCCUPATIONAL EXPOSURE LIMITS** |
| **SUBSTANCE** | **OSHA PEL****TWA (mg/m3)** | **NIOSH REL****TWA (mg/m3)** | **ACGIH TLV****TWA (mg/m3)** | **CA - OSHA PEL TWA (mg/m3)** |
| **Particulates Not Otherwise Regulated** | Total | 15 | 15 | - | 10 |
| Respirable | 5 | 5 | - | 5 |
| **Crystalline** **Silica** | Total Respirable | 0.05 | 0.05 | 0.025 | 0.05 |
| **Calcium Sulfate, anhydrous** **(CAS# 7778-18-9)** | Total Dust | \* | 10 | 10 | \* |
| Respirable | \* | 5 | - | \* |

\* In the absence of a CA-PEL, the value for Particulates Not Otherwise Regulated (PNOR) is applied.

## 8.2 Exposure Controls

### 8.2.1 Engineering Controls

Provide ventilation to maintain the ambient workplace atmosphere below the occupational exposure limit(s). Use general and local exhaust ventilation and dust collection systems as necessary to minimize exposure.

**8.2.2 Personal Protective Equipment (PPE)**

|  |  |
| --- | --- |
| **Respiratory protection:** | Wear a NIOSH approved particulate respirator if exposure to airborne particulates is unavoidable and where occupational exposure limits may be exceeded. If airborne exposures are anticipated to exceed applicable PELs or TLVs, a self-contained breathing apparatus (SCBA) or airline respirator is recommended. |
| **Eye and face protection:** | If eye contact is possible, wear protective glasses with side shields. Avoid contact lenses. |
| **Hand and skin protection:** | Wear gloves and protective clothing. Wash hands with soap and water after contact with material. |

|  |
| --- |
| **Section 9****Physical and Chemical Properties** |

**9.1 Information on Basic Physical and Chemical Properties**

|  |  |
| --- | --- |
| **Property: Value** | **Property: Value** |
| **Appearance (physical state, color, etc.):** White/gray cake-like material  | **Upper/lower flammability or explosive limits:** Not applicable |
| **Odor:** Odorless | **Vapor Pressure (Pa):** Not applicable |
| **Odor threshold:** Not applicable | **Vapor Density:** Not applicable |
| **pH (25 °C)(in water):** 6-8 | **Specific gravity or relative density:** 2.0 – 2.9 |
| **Melting point/freezing point (°C):** 128 | **Water Solubility:** 0.1-0.3% |
| **Initial boiling point and boiling range (°C):** >163 | **Partition coefficient: n-octane/water:** No data |
| **Flash point (°C):** None | **Auto ignition temperature (°C):** Not applicable |
| **Evaporation rate:** Not applicable | **Decomposition temperature (°C):**  1450 |
| **Flammability (solid, gas):** Non-flammable, non-combustible | **Viscosity:** Not applicable |

**9.2 Other Information**

|  |
| --- |
| **Section 10****Stability and Reactivity** |

|  |  |
| --- | --- |
| **10.1 Reactivity:**  | Avoid contact with strong acids or oxidizers and diazomethane. |
| **10.2 Chemical stability:** | The material is stable under normal use conditions. |
| **10.3 Possibility of hazardous reactions:** | The material is a relatively stable, inert material; polymerization will not occur. |
| **10.4 Conditions to avoid:** | Product can become airborne in moderate winds. Dry material should be stored in silos. Materials stored out of doors should be covered or maintained in a damp condition. |
| **10.5 Incompatible materials:** | Acids, ammonium salts, diazomethane, phosphorus and aluminum metal. |
| **10. 6 Hazardous decomposition products:** | None known. |

|  |
| --- |
| **Section 11****Toxicological Information** |

## 11.1 Information on Toxicological Effects

Insert the Table that is applicable to the FGD composition. Delete the other table.

**Toxicological data for FGD Gypsum Composition 1 and 3**

| ***Endpoint*** | ***Data*** |
| --- | --- |
| *Acute oral toxicity* | *Oral LD50: > 2000 mg/kg* |
| *Acute dermal toxicity* | *No data* |
| *Acute inhalation toxicity* | *Inhalation LC50: > 3.26 mg/L* |
| *Skin corrosion/irritation* | *Not irritating or corrosive to skin based on 4-hour, semi-occlusive exposure to rabbits.* |
| *Eye damage/irritation* | *No positive responses in rabbits based upon 24-, 48-, and 72-hour mean scores for corneal opacity, iritis, conjunctival redness/edema.*  |
| *Respiratory/skin sensitization* | *Not a sensitizer.* |
| *Germ cell mutagenicity* | *Several in vitro and in vivo mutagenicity assays determined that calcium sulfate, dihydrate was non-mutagenic, with and without metabolic activation.* |
| *Carcinogenicity* | *No data on calcium sulfate, dihydrate. Carcinogenic studies were not conducted based on the non-neoplastic effects noted in the oral and inhalation repeated dose studies as well as the negative mutagenicity assays.**Respirable crystalline silica has been identified as a carcinogen by NTP, IARC and OSHA.* |
| *Reproductive toxicity* | *No significant developmental or reproductive toxicity were identified in rabbits after exposure to either calcium sulfate, dihydrate or calcium sulfate, dihydrate.* |
| *Specific Target Organ Toxicity–Single Exposure* | *Acute toxicity testing did not result in direct organ toxicity after a single exposure to calcium sulfate, dihydrate. However, as the form tested was not indicated, FGD gypsum dust may result in mechanical respiratory irritation.* |
| *Specific Target Organ Toxicity–Repeated Exposure* | *A repeat dose oral toxicity study (35-45 days) with calcium sulfate, dihydrate conducted using rats reported a NOAEL for males of 100 mg/kg/day on the basis of decreased total protein, albumin, blood urea nitrogen, and creatinine levels observed at the 300 and 1,000 mg/kg/day dose groups. No effects were observed in females.* *Repeated inhalation exposures to high levels of respirable crystalline silica may result in lung damage (silicosis) and lung cancer.*  |
| *Aspiration Hazard* | *Not applicable* |

**Toxicological data for FGD Gypsum Composition 2**

| ***Endpoint*** | ***Data*** |
| --- | --- |
| *Acute oral toxicity* | *Oral LD50: > 2000 mg/kg* |
| *Acute dermal toxicity* | *No data* |
| *Acute inhalation toxicity* | *Inhalation LC50: > 3.26 mg/L* |
| *Skin corrosion/irritation* | *Not irritating or corrosive to skin based on 4-hour, semi-occlusive exposure to rabbits.* |
| *Eye damage/irritation* | *No positive responses in rabbits based upon 24-, 48-, and 72-hour mean scores for corneal opacity, iritis, conjunctival redness/edema.*  |
| *Respiratory/skin sensitization* | *Not a sensitizer.* |
| *Germ cell mutagenicity* | *Several in vitro and in vivo mutagenicity assays determined that calcium sulfate, dihydrate was non-mutagenic, with and without metabolic activation.* |
| *Carcinogenicity* | *No data on calcium sulfate, dihydrate. Carcinogenic studies were not conducted based on the non-neoplastic effects noted in the oral and inhalation repeated dose studies as well as the negative mutagenicity assays.* |
| *Reproductive toxicity* | *No significant developmental or reproductive toxicity were identified in rabbits after exposure to either calcium sulfate, dehydrate or calcium sulfate, dihydrate.* |
| *Specific Target Organ Toxicity–Single Exposure* | *Acute toxicity testing did not result in direct organ toxicity after a single exposure to calcium sulfate, dihydrate. However, as the form tested was not indicated, FGD gypsum dust may result in mechanical irritation.* |
| *Specific Target Organ Toxicity–Repeated Exposure* | *A repeat dose oral toxicity study (35-45 days) with calcium sulfate, dihydrate conducted using rats reported a NOAEL for males of 100 mg/kg/day on the basis of decreased total protein, albumin, blood urea nitrogen, and creatinine levels observed at the 300 and 1,000 mg/kg/day dose groups. No effects were observed in females.* |
| *Aspiration Hazard* | *Not applicable* |

|  |
| --- |
| **Section 12****Ecological Information** |

## 12.1 Toxicity

No data available on final product.

## 12.2 Persistence and Degradability

Not relevant for inorganic materials.

## 12.3 Bioaccumulative Potential

No data available.

## 12.4 Mobility in Soil

No data available.

## 12.5 Results of PBT and vPvB Assessment

No data available.

## 12.6 Other Adverse Effects

None known.

|  |
| --- |
| **Section 13****Disposal Considerations** |

See Sections 7 and 8 for safe handling and use, including appropriate hygienic practices.

|  |
| --- |
|  |

Dispose of in accordance with local and national regulations. Local regulations may be more stringent than regional or national requirements.

|  |
| --- |
| **Section 14****Transport Information** |

|  |  |  |
| --- | --- | --- |
| **Regulatory entity:** U.S. DOT | Shipping Name: | Not regulated |
| Hazard Class: | Not regulated |
| ID Number: | Not regulated |
| Packing Group: | Not regulated |

|  |
| --- |
| **Section 15****Regulatory Information** |

## 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Mixture

* TSCA Inventory Status

FGD gypsum as well as listed impurities are on the TSCA Inventory.

* California Proposition 65

The following substance(s) are known to the State of California to be carcinogens and/or reproductive toxicants:

* + - Respirable crystalline silica
* State Right-to-Know (RTK)

The following substances are present on various State Right-to-Know Lists.

| **Component** | **CAS** | **MA1,2** | **NJ3,4** | **PA5** | **RI6** |
| --- | --- | --- | --- | --- | --- |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Gypsum;calcium sulfate; calcium sulfate, dihydrate | 7778-18-9 OR10101-41-4 | Yes | Yes | Yes | No |
| Calcium carbonate | 1317-65-3 | Yes | Yes | Yes | No |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Silica-crystalline (SiO2), quartz | 14808-60-7 | Yes | Yes | Yes | No |

 *1* Massachusetts Department of Public Health, no date

 *2* 189th General Court of The Commonwealth of Massachusetts, no date

*3* New Jersey Department of Health and Senior Services, 2010a

*4* New Jersey Department of Health, 2010b

*5* Pennsylvania Code, 1986

*6* Rhode Island Department of Labor and Training, no date

* Other Environmental Listings

|  |
| --- |
| **Section 16****Other Information, Including Date of Preparation or Last Revision** |

## 16.1 Indication of Changes

Date of preparation or last revision: INSERT

Revision number:

## 16.2 Abbreviations and Acronyms

* ACAA American Coal Ash Association
* ACGIH: American Conference of Industrial Hygienists
* ANSI: American National Standards Institute
* CA: California
* CAA: Clean Air Act
* CAS: Chemical Abstract Services
* CFR: Code of Federal Regulations
* EPA: Environmental Protection Agency
* FGD Flue Gas Desulfurization
* GHS: Globally Harmonized System of Classification and Labelling
* HMIS: Hazardous Materials Identification System
* IARC: International Agency for Research on Cancer
* LC50: Concentration resulting in the mortality of 50 % of an animal population
* LD50: Dose resulting in the mortality of 50 % of an animal population
* MA: Massachusetts
* NA: Not Applicable
* NIOSH: National Institute of Occupational Safety and Health
* NJ: New Jersey
* NOEC: No observed effect concentration
* NTP: US National Toxicology Program
* OEL: Occupational Exposure Limit
* OSHA: Occupational Safety and Health Administration
* PA: Pennsylvania
* Pa: Paschal
* PBT: Persistent, Toxic and Bioaccumulative
* PEL: Permissible exposure limit
* PNOR Particulates Not Otherwise Regulated
* PPE: Personal Protective Equipment
* RCS: Respirable Crystalline Silica
* REL: Recommended exposure limit
* RI: Rhode Island
* RTK: Right-to-Know
* SARA: Superfund Amendments and Reauthorization Act
* SCBA: Self-contained breathing apparatus
* SDS: Safety Data Sheet
* STOT-RE: Specific target organ toxicity-repeated exposure
* STOT-SE: Specific target organ toxicity-single exposure
* TLV: Threshold limit value
* TSCA: Toxic Substances Control Act
* TWA: Time-weighted average
* UVCB: Unknown or Variable Composition/Biological
* U.S.: United States
* U.S. DOT: United States of Department of Transportation
* vPvB: Very Persistent and Very Bioaccumulative

## 16.3 Other Hazards

FGD Gypsum Classification 1 and 3:

|  |
| --- |
| **Hazardous Materials Identification System (HMIS)**Degree of hazard (0= low, 4 = extreme) |
| **Health:** | 1\* | **Flammability:** | **0** | **Physical Hazards:** | **0** | **Personal protection:** |  |

*\* Chronic Health Effects*

FGD Gypsum Classification 2:

|  |
| --- |
| **Hazardous Materials Identification System (HMIS)**Degree of hazard (0= low, 4 = extreme) |
| **Health:** | 1 | **Flammability:** | **0** | **Physical Hazards:** | **0** | **Personal protection:** |  |

**DISCLAIMER:**

This SDS has been prepared in accordance with the Hazard Communication Rule 29 CFR 1910.1200. Information herein is based on data considered to be accurate as of date prepared. No warranty or representation, express or implied, is made as to the accuracy or completeness of this data and safety information. No responsibility can be assumed for any damage or injury resulting from abnormal use, failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.