



Safety Data Sheet

ADVANCED MATERIALS

SB-432

Prepared in accordance with GB/T 16483-2008, GB/T 24774-2009, GB 13690 – 2009, GB/T 17519–2013
GHS (Globally Harmonized System)

Issue Date 15/Feb/2023
Print Date 01/Mar/2023

Revision Number 1.3.1
Page 1 of 10

Section 1: PRODUCT AND COMPANY IDENTIFICATION

| | |
|----------------------------------|---|
| Product Name: | SB-432 |
| Pure substance/mixture | Substance |
| <u>Aluminum Hydroxide</u> | |
| CAS Number | 21645-51-2 |
| Weight-% | 100 |
| Recommended Use | Flame retardant |
| Uses advised against | None known |
| Company: | J.M. Huber Corporation 3100 Cumberland Boulevard, Suite 600 Atlanta, GA 30339 USA Tel: +1 678 247-7300 |
| Emergency Telephone | CHEMTREC: 1 800 424 9300 or International +1 703 527 3887 |
| E-mail | hubermaterials@huber.com |
| Internet | www.hubermaterials.com |

Section 2: HAZARDS IDENTIFICATION

| | |
|--|----------------|
| GHS Classification | Not classified |
| Physical Hazard | Not classified |
| Health Hazard | Not classified |
| Environmental Hazard | Not classified |
| Label Elements | |
| Symbols/Pictograms | None |
| Signal Word | None |
| <u>Precautionary Statements</u> | |
| Prevention | None |

Issue Date 15/Feb/2023
Print Date 01/Mar/2023

Revision Number 1.3.1
Page 2 of 10

| | |
|--------------------------------|--|
| Response | None |
| Spills and Leaks | Collect spillage |
| Storage | Store in a dry place |
| Disposal | Dispose in accordance with local, state and national regulations |
| General Advice | None |
| Additional Information: | None. |

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture Substance

| Chemical Name | CAS Number | China (IECSC) | China classification | TSCA: United States | EU REACH registration number | Weight-% |
|--------------------|------------|---------------|----------------------|---------------------|------------------------------|----------|
| Aluminum Hydroxide | 21645-51-2 | Y | Not classified | A | 01-2119529246-39 | 100 |

Section 4: FIRST AID MEASURES

| | |
|---|--|
| General Advice | None |
| Eye Contact | Hold eyelids apart and flush eyes with a steady, gentle stream of water for several minutes. |
| Skin Contact | Wash skin with soap and water |
| Inhalation | IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing |
| Ingestion | Rinse mouth with water. Do not induce vomiting. |
| Notes to Physician | Treat symptomatically |
| Personal Protective Equipment For First Aid Responders | Wear suitable protective clothing IF exposed or concerned: Get medical advice/attention |
| Expected acute symptoms and delayed symptoms | None known |

Section 5: FIRE FIGHTING MEASURES

Issue Date 15/Feb/2023
Print Date 01/Mar/2023Revision Number 1.3.1
Page 3 of 10

| | |
|--|---|
| Flammable Properties | None known |
| Suitable Extinguishing Media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Unsuitable extinguishing media: | None known |
| Specific Hazards Arising from the Chemical | None known |
| Unusual fire & explosion hazards: | None |
| Protective measures: | Use protective equipment that is appropriate for surrounding materials. |
| Protective Equipment and Precautions for Firefighters | Wear self-contained breathing apparatus and protective suit |

Section 6: SPILLAGE, ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------|--|
| Personal Precautions | Avoid dust formation. When exposed to high concentrations of airborne dust, wear a SCBA in accordance with national legislation |
| Environmental Precautions | This product does not present any particular risk to the environment. Refer to applicable national, state and local regulations prior to washing in drain. |
| Methods for cleaning up | Pick up mechanically and / or by rinsing with water. Avoid dry sweeping and use a sprinkler system or exhaust ventilation to prevent dust formation. |
| Other Information: | None known |

Section 7: HANDLING AND STORAGE

| | |
|-----------------|--|
| Handling | Avoid dust formation. Avoid breathing dust. Handle in accordance with good industrial hygiene and safety practice. |
| Storage | Store in a dry area. Keep containers closed and protect from physical damage. |

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits Provide adequate ventilation as well as local exhaust at critical locations

Aluminum Hydroxide
ACGIH
NIOSH
OSHA

TLV/TWA 8-hr: 1 mg/m³ (respirable fraction)
TWA: 5 mg/m³ (respirable dust); 10 mg/m³ TWA (total dust)
TWA: 15 mg/m³ Total Dust
5 mg/m³ Respirable Dust

Engineering Measures Ensure adequate ventilation, especially in confined areas
Provide a good standard of controlled ventilation (10 to 15 air changes per hour)

Issue Date 15/Feb/2023
 Print Date 01/Mar/2023

Revision Number 1.3.1
 Page 4 of 10

Personal Protective Equipment

| | |
|--|--|
| Eye/Face Protection | Wear safety glasses with side shields (or goggles) |
| Skin and Body Protection | Wear suitable protective clothing |
| Hand Protection | Impervious gloves |
| Respiratory Protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice |
| Environmental Exposure Controls | Dispose of in accordance with local regulations |

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance:

| | |
|---------------------------------------|--------------------------------|
| Physical State | Solid Powder |
| Odor | Odorless |
| Odor Threshold | No information available |
| pH: | 8.4 - 10.2 5% Water suspension |
| Melting point / Freezing point | ca 300 °C / 572 °F (101.3 kPa) |
| Initial boiling point | 5396 °F (2980 °C) 101.3 kPa |
| Flash Point | Not applicable. |
| Evaporation Rate | Not applicable |
| Flammability (solid, gas) | Not applicable |
| Upper flammability limit: | |
| Lower flammability limit: | |
| Vapor Pressure | Not applicable |
| Vapor Density | Not applicable |
| Relative Density | 2.4 g/cm ³ , 20° C |
| Water Solubility | 0.00009 g/l at 20 °C |
| Solubility in other solvents | No information available |
| Partition coefficient | Not applicable |
| Autoignition Temperature | Not applicable |
| Decomposition Temperature | 392 °F (200 °C) |
| Viscosity | Not applicable. |
| Explosive Properties | None |
| Oxidizing Properties | Not applicable |
| VOC Content (%) | Not applicable |

Section 10: STABILITY AND REACTIVITY

Issue Date 15/Feb/2023
 Print Date 01/Mar/2023

Revision Number 1.3.1
 Page 5 of 10

| | |
|---|--------------------------------|
| Stability | Stable under normal conditions |
| Conditions to avoid: | None known |
| Incompatible materials | Strong acids |
| Hazardous decomposition products | None under normal processing |
| Hazardous Reactions | None under normal processing |
| Hazardous polymerization: | None under normal processing |

Section 11: TOXICOLOGICAL INFORMATION

General Information Users are advised to consider national Occupational Exposure Limits or other equivalent values.

Product Information

Information on Likely Routes of Exposure

| | |
|--------------------------|--|
| Eyes | Avoid contact with eyes Dust contact with the eyes can lead to mechanical irritation |
| Skin | Avoid prolonged or repeated contact with skin |
| Inhalation | Avoid inhalation of the product Inhalation of dust may cause irritation of the respiratory system |
| Ingestion | Ingestion is not a likely route of exposure |
| Aspiration hazard | Not an expected route of exposure. |

Symptoms Low hazard for usual industrial or commercial handling

11.1. Information on toxicological effects

Aluminum Hydroxide

| | |
|------------------------|---|
| Oral LD50 | > 2000 mg/kg Rat |
| Inhalation LC50 | Rat > 2.3 mg/l (Al ₂ O ₃) Aerosol Maximum attainable concentration |
| IARC | Not Listed |

Acute Toxicity Based on available data, the classification criteria are not met

Chronic Toxicity Based on available data, the classification criteria are not met.

Chronic Effects Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation Based on available data, the classification criteria are not met

Issue Date 15/Feb/2023
Print Date 01/Mar/2023

Revision Number 1.3.1
Page 6 of 10

| | |
|---|--|
| Respiratory Sensitization | No information available |
| Skin Corrosion/Irritation | Prolonged or repeated contact may dry skin and cause irritation |
| Skin Sensitization | Based on available data, the classification criteria are not met Not a skin sensitizer Guinea pig |
| Mutagenicity | in vitro. Not genotoxic in bacteria and mammalian cell systems. in vivo. Mutagenicity (micronucleus test). Rat. Negative. (weight of evidence approach). |
| Germ cell mutagenicity | No information available. |
| Reproductive Effects | Based on available data, the classification criteria are not met. |
| Reproductive Toxicity | Based on available data, the classification criteria are not met. |
| Carcinogenicity | This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |
| Specific target organ toxicity - Single exposure | Based on available data, the classification criteria are not met. |
| Specific target organ toxicity - Repeated exposure | Based on available data, the classification criteria are not met. |
| Mixture versus substance information | No information available. |

Section 12: ECOLOGICAL INFORMATION

| | |
|---|---|
| Ecotoxicity | Not considered to be harmful to aquatic life. Avoid release to the environment. |
| Persistence/Degradability: | The methods for determining biodegradability are not applicable to inorganic substances. |
| Bioaccumulative Potential | Not likely to bioaccumulate. |
| Partition coefficient | Not applicable |
| Bioconcentration factor (BCF) | Not available. |
| Mobility in soil | No information available. |
| Results of PBT and vPvB assessment | This substance does not meet the criteria for classification as PBT or vPvB. |
| Other Adverse Effects | No information available |

HUBER

Safety Data Sheet

SB-432

Issue Date 15/Feb/2023
Print Date 01/Mar/2023

Revision Number 1.3.1
Page 8 of 10

| | | | | | | | | | | | | | |
|--------------------|------------|-----------|-------------------|---|---|---|---------------------|----------|---|---|---|---|---|
| Aluminum Hydroxide | 21645-51-2 | 244-492-7 | 01-211952924-6-39 | Y | Y | Y | (1)-17 (ENCS); ISHL | KE-00980 | Y | Y | Y | Y | A |
|--------------------|------------|-----------|-------------------|---|---|---|---------------------|----------|---|---|---|---|---|

Legend

X / Y: Complies ; A: Active ; - / N: Exempt / Not Listed

Section 16: OTHER INFORMATION

| | |
|-----------------------------------|---|
| Prepared by | Huber Engineered Materials Global Regulatory Affairs email: regulatory.affairs@huber.com |
| Reason for Revision | GB/T 16483-2008 GB/T 24774-2009 GB 13690 – 2009 GB/T 17519–2013 |
| GHS Classification | Not classified |
| Physical Hazard | Not classified |
| Health Hazard | Not classified |
| Environmental Hazard | Not classified |
| Label Elements | |
| Symbols/Pictograms | None |
| Signal Word | None |
| Abbreviations and acronyms | <p>IARC (International Agency for Research on Cancer) IATA (International Air Transport Association) IMDG (International Maritime Dangerous Goods) IUCLID (International Uniform Chemical Information Database) WHMIS (Workplace Hazardous Materials Information System) DOT (Department of Transportation) OSHA (Occupational Safety and Health Administration of the US Department of Labor) TWA (Time-Weighted Average) CLP (The Classification, Labeling and Packaging of Substances and Mixtures Regulation (EC 1272/2008)) PPE (Personal Protection Equipment) NIOSH (National Institute for Occupational Safety and Health) TDG (Transport of Dangerous Goods) Canada CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) RQ (Reportable Quantity) (RQ/% in mixture) STEL (Short Term Exposure Limit) TLV® (Threshold Limit Value) DNEL (Derived No Effect Level) SVHC (Substances of Very High Concern) BOD (Biochemical oxygen demand) COD (Chemical oxygen demand) ICAO (International Civil Aviation Organization) IMDG (International Maritime Dangerous Goods) SCBA (Self-Contained Breathing Apparatus) Positive Pressure GHS (Globally Harmonized System) ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road) RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail) SARA (Superfund Amendments and Reauthorization Act of 1986) TSCA (Toxic Substances Control Act)</p> |

HUBER

Safety Data Sheet
SB-432

Issue Date 15/Feb/2023
Print Date 01/Mar/2023

Revision Number 1.3.1
Page 10 of 10

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet