



HYMOD® SB-432 SG

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 24/May/2024
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Section 1: PRODUCT AND COMPANY IDENTIFICATION

| | |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Product Name: | HYMOD® SB-432 SG |
| Chemical Name | Aluminum Hydroxide |
| Pure substance/mixture | Mixture |
| <u>Aluminum Hydroxide</u> | |
| CAS Number | 21645-51-2 |
| Weight-% | >99 |
| <u>Surface Treatment</u> | |
| CAS Number | Trade Secret |
| Weight-% | 1-2 |
| Recommended Use | Flame retardant Smoke suppressant |
| 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 | www.huberadvancedmaterials.com/contact |
| Internet | www.huberadvancedmaterials.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 |

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Hazard Statement None

Precautionary Statements

Prevention Employ good industrial hygiene practice
Wash hands thoroughly after handling

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
IF ON SKIN: Wash with plenty of soap and water

Spills and Leaks Collect spillage

Storage Store in a dry place
Store away from incompatible materials.

Disposal Dispose in accordance with local, state and national regulations

General Advice None When in doubt or if symptoms are observed, get medical advice Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves

Additional Information: None.

Hazards not otherwise classified (HNOC) None known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/mixture Mixture

| 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 | >99 |
| Surface Treatment | Trade Secret | Y | Skin Irritant Category 2; H315 | A | Registered | 1-2 |

Section 4: FIRST AID MEASURES

General Advice None When in doubt or if symptoms are observed, get medical advice Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15

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| | minutes. If irritation persists, call a physician |
| 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

| | |
|--------------------------------------------------------------|--------------------------------------------------------------------------------|
| Flammable Properties | None known |
| Suitable Extinguishing Media | Water spray (fog) Foam Dry chemical Carbon dioxide (CO ₂) |
| 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 | Ensure adequate ventilation Use personal protection recommended in Section 8 Avoid dust formation Keep unauthorized personnel away |
| Environmental Precautions | Avoid runoff to waterways and sewers |
| Methods for cleaning up | Large Spill: Do not dry sweep dust. Wet dust with water before sweeping or use a |

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vacuum to collect dust

Small Spill: Vacuum or sweep material and place in a disposal container

Other Information: None known

Section 7: HANDLING AND STORAGE

Handling Minimize dust generation and accumulation. Provide local exhaust ventilation. 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 exhaustion 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)

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 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

Color

White

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| | |
|---------------------------------------|--------------------------------------------------------------|
| Odor | Odorless |
| Odor Threshold | No information available |
| pH: | 8.4-10.2 (5% water suspension) |
| Melting point / Freezing point | Not applicable |
| Boiling Point | No information available |
| Flash Point | Non-combustible. |
| 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 | Insoluble |
| Solubility in other solvents | No information available |
| Partition coefficient | Not applicable Not applicable Product/Substance is inorganic |
| Autoignition Temperature | Not applicable |
| Decomposition Temperature | 200 °C (392 °F) |
| Viscosity | Not applicable. |
| Explosive Properties | Not applicable |
| Oxidizing Properties | Not oxidizing |
| VOC Content (%) | Not applicable |

9.2. Other information None

Section 10: STABILITY AND REACTIVITY

| | |
|-----------------------------------------|--------------------------------|
| 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 | |

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Information on Likely Routes of Exposure

| | |
|--------------------------|-----------------------------------------------------------------------------------------|
| Eyes | Avoid contact with eyes Dust contact with the eyes can lead to mechanical irritation |
| Skin | Avoid contact with skin and clothing Prolonged exposure may cause skin irritation |
| Inhalation | Avoid inhalation of the product |
| 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. |
| Respiratory Sensitization | Based on available data, the classification criteria are not met. |
| 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. |
| Germ cell mutagenicity | 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. |
| Target Organ Effects | No information available. |
| Specific target organ toxicity - Single exposure | No information available. |
| Specific target organ toxicity - | No information available. |

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Repeated exposure**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: | Not readily biodegradable. |
| Bioaccumulative Potential | No data available. |
| Partition coefficient | Not applicable |
| Bioconcentration factor (BCF) | Not available. |
| Mobility in soil | None. |
| Results of PBT and vPvB assessment | This substance does not meet the criteria for classification as PBT or vPvB. |
| Other Adverse Effects | None known |

Section 13: DISPOSAL CONSIDERATIONS

| | |
|--------------------------------------------|------------------------------------------------------------------------------------------------|
| Waste from Residues/Unused Products | Dispose of in accordance with local regulations |
| Contaminated Packaging: | Empty containers should be taken to an approved waste handling site for recycling or disposal. |

Section 14: TRANSPORT INFORMATION

Mode of Transportation (Road, Water, Air, Rail)

| | |
|-----------------|---------------|
| DOT | Not regulated |
| ADR | Not regulated |
| RID | Not regulated |
| ADN | Not regulated |
| IATA | Not regulated |
| IMDG/IMO | Not regulated |
| ICAO | Not regulated |

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- 14.1. UN number None
- 14.2. UN proper shipping name None
- 14.3. Transport hazard class(es) None
- 14.4. Packing group None
- 14.5. Environmental hazards No
- 14.6. Special precautions for user Not applicable
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global Inventories

| Chemical Name | CAS Number | EC No | EU REACH registration number | Australia (AIC) | Canada (DSL) | China (IECSC) | Japan | S. Korea (KECL) | Mexico | New Zealand | Philippines (PICCS) | Taiwan | TSCA: United States |
|--------------------|--------------|-----------|------------------------------|-----------------|--------------|---------------|---------------------|-----------------|--------|-------------|---------------------|--------|---------------------|
| 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 |
| Surface Treatment | Trade Secret | Y | Registered | Y | Y | Y | Y | Y | Y | Y | Y | Y | A |

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

Compliance with the following Chinese regulatory requirements

State Council Decree No. 591 on Safety Management of Dangerous Chemicals
 GB30000.1 ~ GB30000.29 chemical classification and labeling specifications
 GB / T17519 Guidance for the preparation of the SAFETY SAFETY DATA SHEET
 GB / T16483 Material Safety Data Sheet Content and order of items
 GB13690 General rules for classification and hazard classification of chemicals
 GB15258 chemical safety label preparation requirements

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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 |
| Hazard Statement | None |
| Abbreviations and acronyms | IARC (International Agency for Research on Cancer) IATA (International Air Transport Association) IMDG (International Maritime Dangerous Goods) IUCILID (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) |

HUBER

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RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail)
SARA (Superfund Amendments and Reauthorization Act of 1986)
TSCA (Toxic Substances Control Act)

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End of Safety Data Sheet