Safety Data Sheet

HYMOD® M9400 SP

This material safety datasheet has been prepared according to Brazilian legislation and ABNT NBR 14725:2014
GHS (Globally Harmonized System)

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name: HYMOD® M9400 SP

Chemical Name Mixture

Aluminum Hydroxide
CAS Number 21645-51-2
Weight-% >99
Proprietary Surface Treatment
CAS Number Proprietary
Weight-% <1

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Flame retardant

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company: J.M. Huber Corporation
3100 Cumberland Boulevard, Suite 600
Atlanta, GA 30339 USA
Tel: +1 678 247-7300

Internet www.huberadvancedmaterials.com

E-mail hubermaterials@huber.com

1.4. Emergency telephone number CHEMTREC: +1 800 424 9300 or International +1 703 527 3887

SECTION 2: Hazards identification

Brazil Ministry of Transport This product is not part of the Hazardous Products Classification established by

the Brazilian Federal Department of Transportation's Administrative Ruling 204 from 5/20/1997.

2.1. Classification of the substance or mixture

Physical Hazards Not classified

Health Hazards Not classified

Environmental Hazard Not classified

2.2. Label elements

Symbols/Pictograms None.

Signal Word None.

Hazard Statements None

Precautionary Statements

Prevention
Employ good industrial hygiene practice
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

Response
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
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
If swallowed, rinse mouth with water (only if the person is conscious)
Drink plenty of water

Storage
Store away from incompatible materials
Keep in a dry place

Disposal Dispose of contents/containers in accordance with local regulations

SECTION 3: Composition/information on ingredients

Chemical Name	CAS Number	TSCA: United States	EU REACH registration number	GHS Classification	Weight-%
Aluminum Hydroxide	21645-51-2	A	01-2119529246-39	Not classified.	>99
Proprietary Surface Treatment	Proprietary	A	Registered	Not classified.	<1

Additional information TSCA A: Component is listed on Inventory as Active

SECTION 4: First aid measures

4.1. Description of first aid measures

General Advice	Employ good industrial hygiene practice. Wear suitable protective clothing, gloves and eye/face protection. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. When in doubt or if symptoms are observed, get medical advice.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin Contact	Wash with plenty of soap and water.
Ingestion	Rinse mouth thoroughly with water.
Inhalation	Do not breathe dust. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Aspiration hazard	Based on available data, the classification criteria are not met.
4.2. Most important symptoms and effects, both acute and delayed	May cause irritation to mucous membranes and respiratory tract. Contact with dust can cause mechanical irritation or drying of the skin.
4.3. Indication of any immediate medical attention and special treatment needed	Treatment should be symptomatic and supportive. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

SECTION 5: Firefighting measures

Flammable Properties	None known

5.1. Extinguishing media

Suitable Extinguishing Media	Water spray (fog). Foam. Dry chemical. Carbon dioxide (CO2).
Unsuitable Extinguishing Media	None known.
5.2. Special hazards arising from the substance or mixture	None known.
Dust Explosion Hazard	None known
Hazardous Combustion	None known

Products

5.3. Advice for firefighters

Special protective equipment for firefighters	Wear a self-contained breathing apparatus and chemical protective clothing.
Fire-fighting measures	Water mist may be used to cool closed containers. No special fire protection measures are necessary. Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures	Keep unauthorized personnel away Ensure adequate ventilation Avoid dust formation Use personal protection recommended in Section 8
For non-emergency personnel	Keep unauthorized personnel away.
For emergency responders	Keep unauthorized personnel away Use personal protection recommended in Section 8
6.2. Environmental precautions	Avoid runoff to waterways and sewers.
6.3. Methods and material for containment and cleaning up	Large Spill: Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust Small Spill: Vacuum or sweep material and place in a disposal container
6.4. Reference to other sections	Section 8: Exposure controls and personal protection. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Avoid exposure - obtain special instructions before use Do not handle until all safety precautions have been read and understood. Minimize dust generation and accumulation Do not breathe dust Ensure adequate ventilation Wear appropriate personal protective clothing to prevent skin contact Handle in accordance with good industrial hygiene and safety practice
7.2. Conditions for safe storage, including any incompatibilities	Keep container tightly closed and dry. Store away from incompatible materials.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Aluminum Hydroxide - 21645-51-2

OSHA	TWA: 15 mg/m³ Total Dust 5 mg/m³ Respirable Dust
NIOSH	TWA: 5 mg/m³ (respirable dust); 10 mg/m³ TWA (total dust)
ACGIH	TLV/TWA 8-hr: 1 mg/m³ (respirable fraction)
Mexico	Not established

PNEC (Predicted No Effect Concentration) No information available

Biological Limit Values No information available

8.2. Exposure controls

Engineering Measures Do not handle until all safety precautions have been read and understood
Ensure adequate ventilation, especially in confined areas
Provide a good standard of controlled ventilation (10 to 15 air changes per hour)
Use exhaust ventilation to keep airborne concentrations below exposure limits
In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Wear suitable protective clothing.

Hand Protection For operations where prolonged or repeated skin contact may occur, impervious gloves should be worn.

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

Thermal hazards None known. Wear suitable protective clothing.

Hygiene Measures No information available.

Environmental Exposure Controls Dispose of in accordance with local regulations.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State Solid.

Color White

Odor Odorless

Odor Threshold	No information available
pH:	8.4 - 10.2 (5% water suspension)
Melting point / Freezing point	Not available
Melting Point / Melting Range	Decomposition occurs prior to melting.
Initial boiling point	Not available
Boiling Point	Decomposition occurs prior to boiling.
Flash Point	Non-combustible
Evaporation Rate	Not applicable
Flammability (solid, gas)	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Density	2.4 g/cm3, 20°C
Water Solubility	Insoluble
Partition coefficient	Not applicable
Autoignition Temperature	Not applicable
Decomposition Temperature	200° C
Viscosity	Not applicable
Explosive Properties	Not applicable
Oxidizing Properties	Not applicable
VOC Content (%)	Not applicable

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity	Stable under normal conditions.
10.2. Chemical stability	Stable under normal conditions.
10.3. Possibility of hazardous reactions	No specific hazard known.
10.4. Conditions to avoid	Incompatible materials. Dust formation.

10.5. Incompatible materials None known

10.6. Hazardous decomposition products None known.

SECTION 11: Toxicological information

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

Information on Likely Routes of Exposure

Inhalation Do not breathe dust. Inhalation of dust may cause irritation of the respiratory system.

Skin Contact with dust can cause mechanical irritation or drying of the skin.

Eyes Avoid contact with eyes. Dust contact with the eyes can lead to mechanical irritation.

Ingestion Ingestion is not a likely route of exposure.

Aspiration hazard Not an expected route of exposure.

Symptoms related to the physical, chemical and toxicological characteristics Signs and symptoms may include coughing, gasping, choking and difficulty breathing. Contact with eyes may cause irritation.

11.1. Information on toxicological effects

Aluminum Hydroxide - 21645-51-2

Oral LD50	> 2000 mg/kg Rat
Inhalation LC50	Rat > 2.3 mg/l (Al_2O_3) Aerosol Maximum attainable concentration
IARC	Not Listed

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

Chronic Toxicity Not classified.

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

Serious eye damage/eye irritation Dust may cause mechanical irritation to eyes.

Respiratory Sensitization No data 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.
Mutagenicity	No data available.
Germ cell mutagenicity	No data available.
Reproductive Toxicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Not listed.
Specific target organ toxicity - Single exposure	No data available.
Specific target organ toxicity - Repeated exposure	No data available.
Mixture versus substance information	No information available.

SECTION 12: Ecological information

12.1. Ecotoxicity Not considered to be harmful to aquatic life. Avoid release to the environment.

Aluminum Hydroxide - 21645-51-2

WGK Classification (AwSV) 5220 WGK: nwg

12.2. Persistence and degradability Not biodegradable.

12.3. Bioaccumulative potential This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

Partition coefficient Not applicable.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects None known

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Contaminated Packaging	Product residue may remain in empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Waste codes	Waste codes should be assigned by the user based on the application for which the product was used
Disposal Methods	Dispose of waste product or used containers according to local regulations

Aluminum Hydroxide - 21645-51-2
European Waste Catalog 060299

SECTION 14: Transport information

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

ADR	Not regulated
RID	Not regulated
ADN	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
ICAO	Not regulated
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

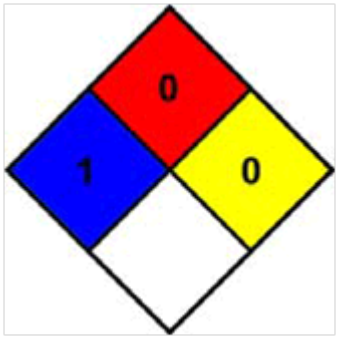
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Global Inventories

Chemical Name	CAS Number	EC No	EU REACH registration number	Australia (AIIC)	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	01-2119529246-39	Y	Y	Y	(1)-17 (ENCS); ISHL	KE-00980	Y	Y	Y	Y	A
Proprietary Surface Treatment	Proprietary	*	Registered	Y	Y	Y	Y	Y	Y	-	Y	Y	A

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

Information on risks and safety as written on the label
Health - Blue
Flammability - Red
Physical Hazard - Yellow
Special - White



4- Extreme
3- High
2- Moderate
1- Low
0- Minimum

SECTION 16: Other information

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Training Advice	Do not handle until all safety precautions have been read and understood.

Abbreviations and acronyms

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
PNEC (Predicted No Effect Concentration)
GHS (Globally Harmonized System)
TSCA (Toxic Substances Control Act)

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