

MoldX® A110

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

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Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:	MoldX® A110
Pure substance/mixture	Substance
Aluminum Hydroxide CAS Number Weight-%	21645-51-2 100
Recommended Use	Flame retardant
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
Precautionary Statements	
Prevention	None

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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	REACH registration	Weight-%
Aluminum Hydroxide	21645-51-2	Y	Not classified	Y	number 01-2119529246-39 -0016	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

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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: EXPC	SURE 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

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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

Appearance.	
Physical State	Solid
,	Powder
Odor	Odorless
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Odor Threshold	No information available
pH:	8.4 - 10.2 5% Water suspension
Melting point / Freezing point	ca 300 °C / 572 °F (1013 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/cm3, 20° C
Water Solubility	Insoluble
Solubility in other solvents	No information available
Partition coefficient	No information available
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

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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
Inhalation	Based on available data, the classification criteria are not met
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
Aspiration hazard	Not an expected route of exposure.

11.1. Information on toxicological effects

Aluminum Hydroxide Oral LD50 Inhalation LC50 IARC	> 2000 mg/kg Rat Rat > 2.3 mg/l (Al2O3) Aerosol Maximum attainable concentration 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	Non-irritant Rabbit
Respiratory Sensitization	No information available

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Skin Corrosion/Irritation	Non-irritant Rabbit
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	Based on available data, the classification criteria are not met.
Specific target organ toxicity - Single exposure	Not classified.
Specific target organ toxicity - Repeated exposure	No information available.
Mixture versus substance information	No information available.

Section 12: ECOLOGICAL INFORMATION

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

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

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or disposal.

Section 14: TRANSPORT INFORMATION

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

DOT ADR RID ADN IATA IMDG/IMO ICAO	Not regulated Not regulated Not regulated Not regulated Not regulated Not regulated 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	REACH registration number	Australia (AICS)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	New Zealand	Philippin es (PICCS)	Taiwan	TSCA: United States
Aluminum Hydroxide	21645-51- 2	244-492-7	01-211952924 6-39-0016	Ŷ	Ŷ	Ŷ	Ŷ	KE-00980	Ŷ	Ŷ	Ŷ	Ŷ	Ŷ

Legend

X / Y: Complies - / N: Not Listed Exempt

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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
Abbreviations and acronyms	International Agency for Research on Cancer (IARC) International Air Transport Association (IATA) International Maritime Dangerous Goods (IMDG) International Uniform Chemical Information Database (IUCLID) Workplace Hazardous Materials Information Database (IUCLID) Workplace Hazardous Materials Information System (WHMIS) status and classification EPA SARA Title III Section 312 (40 CFR 370) Hazard Classification DOT (Department of Transportation) OSHA (Occupational Safety and Health Administration of the US Department of Labor) TWA - Time-Weighted Average Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) The Classification, Labeling and Packaging of Substances and Mixtures (CLP) 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) Reportable Quantity (RQ) (RQ/% in mixture) STEL - Short Term Exposure Limit TLV® - Threshold Limit Value Derived No Effect Level (DNEL) SVHC: Substances of Very High Concern for Authorization: Land transport (ADR/RID) Biochemical oxygen demand (BOD) Chemical oxygen demand (COD) ICAO (air) (IMDG) International Maritime Dangerous Goods Positive Pressure Self-Contained Breathing Apparatus (SCBA) Predicted No Effect Concentration (PNEC) Globally Harmonized System (GHS)

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End of Safety Data Sheet