



# Safety Data Sheet

ADVANCED MATERIALS

## MoldX® A400

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006  
COMMISSION REGULATION (EU) No. 2020/878

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

#### 1.1. Product identifier

**Product Name:** MoldX® A400  
**Chemical Name** Aluminum Hydroxide

Chemical Name	CAS Number	EC No	EU REACH registration number	(CLP) Regulation (EC 1272/2008)	Weight-%
Aluminum Hydroxide	21645-51-2	244-492-7	01-2119529246-39	Not classified	>95
Flame Retardant Proprietary		Y		Not classified	<5

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

**Recommended use:** Flame retardant  
Smoke Suppressant

**Uses advised against** None known.

#### 1.3. Details of the supplier of the safety data sheet

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

MARTINSWERK GmbH  
Kölner Strasse 110  
50127 Bergheim  
Germany  
Tel. : +49-2271-90.22.78  
Fax. : +49-2271-90.27.17

**Internet** [www.hubermaterials.com](http://www.hubermaterials.com)

**E-mail** [hubermaterials@huber.com](mailto:hubermaterials@huber.com)

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

**Poison control center phone number** National Anti-Poison Center UK: +44 844 892 0111 (National Poisons Information Service)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**(CLP) Regulation (EC 1272/2008)** Not classified

#### Hazards identification

<b>Physical Hazard</b>	Not classified
<b>Health Hazards</b>	Not classified
<b>Environmental Hazard</b>	Not classified

### 2.2. Label elements

<b>Symbols/Pictograms</b>	None
<b>Signal Word</b>	None
<b>Hazard Statements</b>	None

### Precautionary Statements

<b>Prevention</b>	Employ good industrial hygiene practice Wash hands thoroughly after handling
<b>Response</b>	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
<b>Storage</b>	Keep in a dry place Store away from incompatible materials
<b>Disposal</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.

**2.3. Other hazards** No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixture

Mixture

Chemical Name	CAS Number	EC No	EU REACH registration number	(CLP) Regulation (EC 1272/2008)	Annex	Weight-%
Aluminum Hydroxide	21645-51-2	244-492-7	01-2119529246-39	Not classified	--	>95
Flame Retardant Proprietary		Y		Not classified	--	<5

**SECTION 4: First aid measures****4.1. Description of first aid measures**

<b>General Advice</b>	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.
<b>Eye Contact</b>	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Skin Contact</b>	Wash with plenty of soap and water.
<b>Inhalation</b>	Do not breathe dust. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Rinse mouth thoroughly with water.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Notes to Physician</b>	Treat symptomatically.
<b>4.2. Most important symptoms and effects, both acute and delayed</b>	Dust contact with the eyes can lead to mechanical irritation. Contact with dust can cause mechanical irritation or drying of the skin.
<b>4.3. Indication of any immediate medical attention and special treatment needed</b>	Treat symptomatically. 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****5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing agent suitable for type of surrounding fire. Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media**

None known.

**5.2. Special hazards arising from the substance or mixture**

Non-combustible.

**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.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Ensure adequate ventilation. Use personal protection recommended in Section 8. Keep unauthorized personnel away.

**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  
Ensure adequate ventilation  
Handle in accordance with good industrial hygiene and safety practice  
Use personal protective equipment as required

**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

ACGIH  
OSHA

TLV/TWA 8-hr: 1 mg/m<sup>3</sup> (respirable fraction)  
TWA: 15 mg/m<sup>3</sup> Total Dust  
5 mg/m<sup>3</sup> Respirable Dust

NIOSH  
France  
France

TWA: 5 mg/m<sup>3</sup> (respirable dust); 10 mg/m<sup>3</sup> TWA (total dust)  
Not established (Non établi)  
Not established (Non établi)

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<b>Poland</b>	2.5 mg/m <sup>3</sup> (inhalable); 1.2 mg/m <sup>3</sup> (respirable)
<b>Switzerland</b>	TWA: 3 mg/m <sup>3</sup>
<b>United Kingdom</b>	10 mg.m-3 (inhalable); 4 mg.m-3 (respirable)

**Recommended monitoring procedures** Refer also to national guidance documents for information on currently recommended monitoring procedures

**Biological Limit Values** None

## 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** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Thermal hazards** None known.

**Hygiene Measures** Follow general hygiene considerations recognized as common good workplace practices

**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

#### Appearance:

<b>Physical State</b>	Solid Powder
<b>Color</b>	White
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH:</b>	8.4-10.2 (5% water suspension)

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Melting point / Freezing point	Not applicable
Initial boiling point	No information available
Freezing Point	Not applicable
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
Vapor Density	Not applicable
Density	2.4 g/cm <sup>3</sup> , 20°C
Relative Density	
Water Solubility	Insoluble
Partition coefficient	Not applicable
Autoignition Temperature	Not applicable
Decomposition Temperature	200° C
Viscosity	No information available.
Kinematic viscosity	Not applicable
Oxidizing Properties	Not applicable
Particle Size	No information available
VOC Content (%)	Not applicable

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

Not applicable

### 9.2.2. Other safety characteristics

Not applicable

## 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.

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Aluminum Hydroxide**

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

**Information on Likely Routes of Exposure**

**Inhalation** Do not breathe dust  
Inhalation of dust in high concentration may cause irritation of respiratory system

**Ingestion** Ingestion is not a likely route of exposure

**Skin** Prolonged or repeated contact may dry skin and cause irritation

**Eyes** Dust contact with the eyes can lead to mechanical irritation

**Aspiration hazard** Not an expected route of exposure.

**11.2. Information on other hazards**

**11.2.1. Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors

**11.2.2. Other information** Not applicable

**SECTION 12: Ecological information**

**12.1. Toxicity** Not considered to be harmful to aquatic life

**Aluminum Hydroxide**

**WGK Classification (AwSV)** 5220 WGK: nwg

**12.2. Persistence and degradability** No data available.

**12.3. Bioaccumulative potential** No data available.

**Partition coefficient** Not applicable

**Bioconcentration factor (BCF)** No data available.

**12.4. Mobility in soil** No data available.

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**12.5. Results of PBT and vPvB assessment** No data available.

**12.6. Endocrine disrupting properties** This product does not contain any known or suspected endocrine disruptors

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**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

#### Aluminum Hydroxide

**European Waste Catalog** 060299

**WGK Classification (AwSV)** 5220 WGK: nwg

## SECTION 14: Transport information

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

<b>TDG -Canada</b>	Not regulated
<b>DOT</b>	Not regulated
<b>ADR</b>	Not regulated
<b>RID</b>	Not regulated
<b>ADN</b>	Not regulated
<b>IATA</b>	Not regulated
<b>IMDG/IMO</b>	Not regulated
<b>ICAO</b>	Not regulated

**14.1. UN number or ID number** None

**14.2. UN proper shipping name** None

**14.3. Transport hazard class(es)** None

**14.4. Packing group** None



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14.5. Environmental hazards No

14.6. Special precautions for user Not applicable

14.7. Maritime transport in bulk according to IMO instruments  
 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	Australia (AIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	Thailand (TECI)	New Zealand	Philippines (PICCS)	Taiwan	TSCA: United States
Aluminum Hydroxide	21645-51-2	244-492-7	Y	Y	Y	(1)-17 (ENCS); ISHL	KE-00980	Y	55-1-02594	Y	Y	Y	A
Flame Retardant Proprietary		Y	Y	Y	Y	Y	KE-18101	Y	55-1-06093	Y	Y	Y	A

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

#### REACH No.

#### Aluminum Hydroxide

EU REACH registration number 01-2119529246-39  
 Turkish KKDIK pre-registration 05-0000193352-73-0000

#### Germany

#### Aluminum Hydroxide

WGK Classification (AwSV) 5220 WGK: nwg

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were carried out

## SECTION 16: Other information

**Reason for Revision** This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 & COMMISSION REGULATION (EU) No. 2020/878

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(CLP) Regulation (EC 1272/2008) Not classified

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### Labeling

**Symbols/Pictograms** None

**Signal Word** None

**Hazard Statements** None.

### Training Advice

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

### Abbreviations and acronyms

IARC (International Agency for Research on Cancer)  
IUCLID (International Uniform Chemical Information Database)  
WHMIS (Workplace Hazardous Materials Information System)  
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)  
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)  
ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
RID (Agreement Concerning the International Carriage of Dangerous Goods by Rail)  
IATA (International Air Transport Association)  
IMDG (International Maritime Dangerous Goods)  
DOT (Department of Transportation)  
TDG (Transport of Dangerous Goods) Canada  
PNEC (Predicted No Effect Concentration)  
SCBA (Self-Contained Breathing Apparatus) Positive Pressure  
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**