ADVANCED **MATERIALS**

Safety Data Sheet

MoldX® P18

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

Issue Date 12/Sep/2023 **Revision Number** 1.3.3 Print Date 12/Sep/2023

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

1.1. Product identifier

Product Name: MoldX® P18

Chemical Name Aluminum Hydroxide

Pure substance/mixture Substance

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

Manufacturer MARTINSWERK GmbH

> Kölner Strasse 110 50127 Bergheim

Germany: +49-2271-90.22.78 Fax.: +49-2271-90.27.17

Internet www.huberadvancedmaterials.com

Contact E-Mail www.huberadvancedmaterials.com/contact

E-mail 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

Not classified Physical Hazard

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Not classified **Health Hazards**

Not classified **Environmental Hazard**

2.2. Label elements

Symbols/Pictograms None

Signal Word None

None **Hazard Statements**

Precautionary Statements

Prevention Employ good industrial hygiene practice

Wash hands thoroughly after handling

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact Response

lenses, if present and easy to do. Continue rinsing IF ON SKIN: Wash with plenty of soap and water

Keep in a dry place Storage

Store away from incompatible materials

Disposal should be in accordance with applicable regional, national and local laws Disposal

and regulations.

Additional Information: None.

2.3. Other hazards No information available.

SECTION 3: Composition/information on ingredients

3.1. Substance Substance

Chemical Name	CAS Number	EC No	(CLP) Regulation (EC 1272/2008)	Weight-%	
Aluminum Hydroxide	21645-51-2	244-492-7	Not classified.	100	

SECTION 4: First aid measures

4.1. Description of first aid measures

When in doubt or if symptoms are observed, get medical advice. Ensure that **General Advice**

medical personnel are aware of the material(s) involved and take precautions to

protect themselves.

Eye Contact In case of eye contact, remove contact lens and rinse immediately with plenty of

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water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash with plenty of soap and water.

Inhalation If breathing is difficult, remove victim to fresh air and keep at rest in a position

comfortable for breathing.

Ingestion Rinse mouth thoroughly with water.

Aspiration hazard Not an expected route of exposure.

Notes to Physician Treat symptomatically.

4.2. Most important symptoms

and effects, both acute and delayed

Signs and symptoms may include coughing, gasping, choking and difficulty

breathing.

4.3. Indication of any immediate Treatment should be symptomatic and supportive.

medical attention and special

treatment needed

SECTION 5: Firefighting measures

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.

5.3. Advice for firefighters

Special protective

equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Fire-fighting measures

In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

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6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protection recommended in Section 8.

Avoid dust formation. 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

Minimize dust generation and accumulation

Provide local exhaust ventilation

Handle in accordance with good industrial hygiene and safety practice

7.2. Conditions for safe storage, Store away from incompatible materials including any incompatibilities Keep container tightly closed and dry

7.3. Specific end use(s) Flame retardant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Aluminum Hydroxide

ACGIH TLV/TWA 8-hr: 1 mg/m3 (respirable fraction)

TWA: 15 mg/m³ Total Dust **OSHA** 5 mg/m³ Respirable Dust

TWA: 5 mg/m³ (respirable dust); 10 mg/m³ TWA (total dust) NIOSH

France Not established (Non établi) **France** Not established (Non établi)

2.5 mg/m³ (inhalable); 1.2 mg/m³ (respirable) **Poland**

Switzerland TWA: 3 mg/m³

10 mg.m-3 (inhalable); 4 mg.m-3 (respirable) **United Kingdom**

Recommended monitoring

procedures

Refer also to national guidance documents for information on currently

recommended monitoring procedures

None **Biological Limit Values**

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DNEL (Derived No Effect Level) Consumer - oral, long-term - local and systemic 4.74 mg/kg bw/day

Worker - inhalative, long-term - local and systemic 10.74 mg/m³

PNEC (Predicted No Effect Concentration) No information available

8.2. Exposure controls

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.

Thermal hazards None known.

Hygiene Measures Follow general hygiene considerations recognized as common good workplace

practices

The worker should wash daily at the end of each work shift, and prior to eating,

drinking, smoking, etc

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:

Physical State Solid Powder Odor Odorless

Odor Threshold No information available

pH: 8.4 - 10.2 5% Water suspension Melting point / Freezing point ca $300 \,^{\circ}\text{C}$ / 572 $^{\circ}\text{F}$ (101.3 kPa) 101.3 kPa

Freezing Point
Flash Point
Evaporation Rate
Flammability (solid, gas)
Flammability (solid, gas)
Not applicable
Not applicable
Not applicable
Not applicable
Not applicable

Upper flammability limit: -Lower flammability limit: --

Vapor PressureNot applicableVapor DensityNot applicable

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Vapor Density Not applicable No data available **Density 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) Not applicable. **Viscosity** Kinematic viscosity Not applicable

Explosive Properties None

Not applicable **Oxidizing Properties**

No information available **Particle Size**

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 None

10.2. Chemical stability Stable under normal conditions

10.3. Possibility of hazardous

reactions

None under normal processing

10.4. Conditions to avoid Incompatible materials

10.5. Incompatible materials Strong acids

10.6. Hazardous decomposition None known

products

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

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Oral LD50 > 2000 mg/kg Rat

Rat > 2.3 mg/l (Al2O3) Aerosol Maximum attainable concentration **Inhalation LC50**

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.

Respiratory Sensitization No information available

Serious eye damage/eye

irritation

Non-irritant Rabbit

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

Information on Likely Routes of Exposure

Do not breathe dust Inhalation

Inhalation of dust may cause irritation of the respiratory system

Ingestion Ingestion is not a likely route of exposure

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

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

Aspiration hazard Not an expected route of exposure.

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11.2. Information on other hazards

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

properties

11.2.2. Other information Not applicable

SECTION 12: Ecological information

Not considered to be harmful to aquatic life 12.1. Toxicity

Aluminum Hydroxide

WGK Classification (AwSV) 5220 WGK: nwg

The methods for determining biodegradability are not applicable to inorganic 12.2. Persistence and

substances.

12.3. Bioaccumulative potential Not likely to bioaccumulate.

Partition coefficient No information available

Bioconcentration factor

(BCF)

degradability

Not available.

12.4. Mobility in soil No information available.

12.5. Results of PBT and vPvB

assessment

This substance does not meet the criteria for classification as PBT or vPvB.

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.

Empty containers should be taken to an approved waste handling site for recycling **Contaminated Packaging**

or disposal.

Waste codes should be assigned by the user based on the application for which Waste codes

the product was used

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Aluminum Hydroxide

European Waste Catalog 060299

WGK Classification (AwSV) 5220 WGK: nwg

SECTION 14: Transport information

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

TDG -Canada Not regulated DOT Not regulated Not regulated **ADR** Not regulated RID Not regulated ADN **IATA** Not regulated Not regulated IMDG/IMO Not regulated **ICAO**

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

14.5. Environmental hazards No

14.6. Special precautions for Not applicable

user

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

Pure substance/mixture Substance

Chemical Name	CAS Number	EC No	Australia (AIIC)	Canada (DSL)	China (IECSC)	Japan	S. Korea (KECL)	Mexico	Thailand (TECI)	-	Philippine s (PICCS)		TSCA: United States
Aluminum Hydroxide	21645-51- 2	244-492-7	Y	Y	Y	(1)-17 (ENCS); ISHL	KE-00980	Y	55-1-0259 4	Y	Y	Υ	А

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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

Not considered to be harmful to aquatic life

Aluminum Hydroxide

WGK Classification (AwSV) 5220 WGK: nwg

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance

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

Issue Date 12/Sep/2023 **Print Date** 12/Sep/2023

1.3.3 **Revision Number**

Prepared by **Huber Engineered Materials Global Regulatory Affairs**

email: regulatory.affairs@huber.com.

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

Labeling

Symbols/Pictograms None

Signal Word None

Hazard Statements None.

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

IARC (International Agency for Research on Cancer) Abbreviations and acronyms

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)

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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