



HUBER ENGINEERED MATERIALS

Safety Data Sheet

GRANITE ELITE®

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03
Canadian Workplace Hazardous Material Information System (WHMIS) 2015
Mexico NOM-018-STPS-2000; NOM-018-STPS-2015
Globally Harmonized System (GHS)

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

1.1. Product identifier

Product Name: GRANITE ELITE®

Aluminum Hydroxide

CAS Number 21645-51-2

Weight-% -

Pigment

CAS Number Proprietary

Weight-% -

Titanium Oxide

CAS Number 13463-67-7

Weight-% -

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

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

Internet www.hubermaterials.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

2.1. Classification of the substance or mixture

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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	Do not handle until all safety precautions have been read and understood. Employ good industrial hygiene practice 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

Hazards not otherwise classified None known.
(HNOC)

SECTION 3: Composition/information on ingredients

Chemical Name	CAS Number	TSCA: United States	Canada (DSL)	Mexico	REACH registration number	OSHA Regulatory Status	WHMIS	Weight-%
Aluminum Hydroxide	21645-51-2	Y	Y	Y	01-211952924-6-39-0016	Not classified	--	-
Pigment	Proprietary	Y	Y		Not registered	Not classified	--	-
Titanium Oxide	13463-67-7	Y	Y	Y	Not registered	Not classified	--	-

Legend

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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

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

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. Avoid dust formation. Ensure adequate ventilation. 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**

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OSHA	TWA: 15 mg/m ³ Total Dust 5 mg/m ³ Respirable Dust
ACGIH	TLV/TWA 8-hr: 1 mg/m ³ (respirable fraction)
NIOSH	TWA: 5 mg/m ³ (respirable dust); 10 mg/m ³ TWA (total dust)
Canada - BC TWA	TWA: 1 mg/m ³ (respirable)
Canada - Manitoba - OEL - TWA	TWA: 1 mg/m ³ (respirable)
Canada - Newfoundland & Labrador - OEL - TWA	TWA: 1 mg/m ³ (respirable)
Canada - Nova Scotia - OEL - TWA	TWA: 1 mg/m ³ (respirable)
Canada - Prince Edward Island - OEL - TWA	TWA: 1 mg/m ³ (respirable)
Mexico	No se ha establecido

Titanium Oxide

OSHA	10 mg/m ³
ACGIH	10 mg/m ³
Canada	10 mg/m ³ TWA
Canada - BC TWA	3 mg/m ³ (respirable); 10 mg/m ³ (total)
Canada - Manitoba - OEL - TWA	10 mg/m ³ TWA
Canada - Newfoundland & Labrador - OEL - TWA	10 mg/m ³ TWA
Canada - Nova Scotia - OEL - TWA	10 mg/m ³ TWA
Canada - Prince Edward Island - OEL - TWA	10 mg/m ³ TWA
Mexico	10 mg/m ³

Biological Limit Values: No information available**8.2. Exposure controls**

Engineering Measures Provide a good standard of controlled ventilation (5 to 10 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 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
Color	White
Odor	Odorless
Odor Threshold	No information available
pH:	8.5 (20 % solution)
Melting point / Freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash Point:	Non-combustible.
Evaporation Rate	Not applicable.
Flammability (solid, gas)	
Upper flammability limit:	Not applicable
Lower flammability limit:	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not available
Relative Density	Not applicable
Water Solubility	Insoluble
Solubility in other solvents	
Partition coefficient	Not applicable
Autoignition Temperature	Not applicable
Decomposition Temperature	392 °F (200 °C)
Viscosity	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

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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 in high concentration may cause irritation of respiratory system
Skin	Contact with dust can cause mechanical irritation or drying of the skin
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.

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

Titanium Oxide

Oral LD50	10000 mg/kg (rat)
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Acute Toxicity	Not classified
Chronic Effects	Not classified.
Respiratory Sensitization	Not expected to be a sensitizer.
Serious eye damage/eye irritation	May cause temporary eye irritation
Skin Corrosion/Irritation	Prolonged or repeated contact may dry skin and cause irritation
Skin Sensitization	Not expected to be a skin sensitizer.
Germ cell mutagenicity	Not mutagenic.
Reproductive Toxicity	No known effect.
Specific target organ toxicity - Single exposure	Not classified.
Specific target organ toxicity - Repeated exposure	Not classified.

SECTION 12: Ecological information

12.1. Ecotoxicity Not considered to be harmful to aquatic life.

Aluminum Hydroxide

WGK Classification (VwVwS) 5220 WKG: 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.

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

12.6. Other adverse effects No information available

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 (VwVwS) 5220 WKG: nwg

SECTION 14: Transport information

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

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TDG -Canada	Not regulated
DOT	Not regulated
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

Global Inventories

Chemical Name	CAS Number	EC No	REACH registration number	Australia (AICS)	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	01-211952 9246-39-0 016	Y	Y	Y	Y	KE-00980	Y	Y	Y	Y	Y
Pigment	Proprietary	Proprietary	Not registered		Y								Y
Titanium Oxide	13463-67-7	236-675-5	Not registered	Y	Y	Y	(5)-5225 (ENCS) (1)-558 (ENCS)	KE-33900	Y	Y	Y		Y

Legend

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

US Federal Regulations

EPA

CERCLA
Aluminum Hydroxide
CERCLA

Not listed

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SARA 311/312 Hazardous
Categorization
SARAH 302 RQ, lbs

Not listed
Not listed

U.S. State Right-to-Know Regulations

Chemical Name	CAS Number	California Proposition 65	California CPR	Massachusetts	Minnesota	New Jersey	Pennsylvania
Aluminum Hydroxide	21645-51-2	No		No	No	No	No
Pigment	Proprietary						
Titanium Oxide	13463-67-7			Y	Y	Y	Y

CANADA

WHMIS:

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR

SECTION 16: Other information

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Reason for Version OSHA (Occupational Safety and Health Administration of the US Department of Labor).

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

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 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)

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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)

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