SAFETY DATA SHEET (SDS) UN GLOBALLY HARMONIZED SYSTEM (GHS) FOR HAZARD COMMUNICATION BUFFING SOLUTION Warning Warning - - - HEALTH 2 FLAMMABILITY 0 PHYSICAL HAZARD 0 PERSONAL PROTECTION F

SECTION 1: IDENTIFICATION

TUE 3-OCT-2017 14:51

1.1 Product Identification

GHS Product Identifier/Label

Buffing Solution

Product Codes/Names

VMI PN7076

1.2 Recommended Use of the Chemical and Restrictions on Use

Recommended Use	Disk cleaning and polishing
Restrictions On Use	None identified

1.3 Supplier's Details

Company VENMILL INDUSTRIES

30 TOWN FOREST RD OXFORD MA 01540-2833

USA



EMERGENCYInformation Services

VENMILL: In United States, Canada, Puerto Rico, and the US Virgin Islands: 1-866-864-0210; Outside the United States: +01 or +001 508-363-0410 (call collect). Customer Support hours are Monday - Friday from 8:30 AM - 5:00 PM Eastern

time (GMT-05:00).

IF A PERSON HAS COLLAPSED, HAD A SEIZURE, HAS TROUBLE BREATHING, OR CANNOT BE AWAKENED, IMMEDIATELY CALL LOCAL EMERGENCY MEDICAL

SERVICES (EMS).

REFER TO SDS SECTION 4, THE USA POISON HELP LINE AT 1-800-222-1222, OR USE POISONHELP.ORG

1222, OK OSL FOISOMHELF.OKG

SECTION 2: HAZARD IDENTIFICATION

2.1 Classification of the Substance or Mixture

Hazard Category Serious eye damage/eye irritation Cat 2

2.2 GHS Label Elements

Hazard Pictograms



Signal Words

Warning

Warning

[blank]

[blank]

[blank]

Hazard Statements

H319: Causes serious eye irritation

Precautionary Statements P264: Wash thoroughly after handling

P280: Wear protective gloves/protective clothing/eye

protection/face protection

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to

do – continue rinsing

P337+313: If eye irritation persists get medical advice/attention

P101: If medical advice is needed, have product container or

label at hand

P102: Keep out of reach of children

P103: Read label before use

2.3 Unclassified Contributing Hazards

None identified.

2.4 HMIS® Ratings

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	F

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Identity	Common Name	CAS	EC	REACH	Impurity Additives
Aluminum Oxide		1344-28-1	215-691-6	01- 211952924 8-35-0063	
Mineral Oil		8042-47-5	232-455-8		
Aluminum Nitrate		7784-27-2	236-751-8		

3.2 Mixtures

Chemical Identity	Common Name	CAS	EC	REACH	Mass Volume (%)
Aluminum Oxide		1344-28-1	215-691-6		10-20

Mineral Oil	8	8042-47-5	232-455-8	1-5
Aluminum Nitrate	7	7784-27-2	236-751-8	<3

SECTION 4: FIRST-AID MEASURES

4.1 Description of Necessary First-Aid Measures

EMERGENCY	IF A PERSON HAS COLLAPSED, HAD A SEIZURE, HAS TROUBLE BREATHING, OR CANNOT BE AWAKENED, IMMEDIATELY CALL LOCAL EMERGENCY MEDICAL SERVICES (EMS).
	REFER TO SDS SECTION 4, THE USA POISON HELP LINE AT 1-800-222-1222, OR USE POISONHELP.ORG
General 	Movement of the exposed individual from the area to fresh air is recommended.
Inhalation	In case of inhalation exposure: Remove source of exposure or move person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call local Emergency Medical Services (EMS). If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by EMS.
Skin	In case of skin exposure: Rinse/wash with lukewarm, gently flowing water (and mild soap) for 5 minutes or until product is removed. If skin irritation occurs or persons feel unwell, get medical advice/attention.
Eye	In case of eye exposure: Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists, get medical advice/attention.
Ingestion	In case of ingestion: Rinse mouth. If persons feel unwell, if concerned, get medical advice/attention.
4.2 Most Important Symptoms/Effects, Acute and Delayed	Causes eye irritation. May cause skin irritation.
4.3 Indication of Immediate Medical Attention and Treatment Needed	An allergic or asthmatic response (sensitzation reaction), may occur in some exposed individuals. If these symptoms occur, call local Emergency Medical Services (EMS).
	SECTION 5: FIRE-FIGHTING MEASURES
5.1 Suitable Extinguishing Media	UL-rated 3-A:40-B:C extinguisher is suggested. Suitable media: Carbon dioxide {CO ₂ }; dry chemical {sodium bicarbonate NaHCO ₃ , potassium bicarbonate KHCO ₃ }; low-expansion aqueous film forming foams (AFFF) {1,3-Propanediol CH ₂ (CH ₂ OH) ₂ , 2-Methyl-2,4-pentanediol (CH ₃) ₂ C (OH)CH ₂ CH(OH)CH ₃ + Dodecanol CH ₃ (CH ₂) ₁₀ CH ₂ OH}.
5.2 Special Hazards Arising from Chemicals	Product is not flammable or combustible. Buffing dusts may be flammable or explosive.

5.3 Special Protective Actions for Fire-Fighters

Firefighters should wear Self-Contained Breathing Apparatus (SCBA) and full protective equipment.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures Wear personal protective equipment (PPE) respirator.

6.2 Environmental Precautions

Avoid contamination of water supplies. Report spills as

required.

6.3 Methods and Materials for Containment and Cleaning Up Observe precautions from other sections. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spill material as possible. Clean up residue with detergent and water.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment (PPE). Wash thoroughly after handling. Consider potential exposure to processed base materials or coatings.

7.2 Conditions for Safe Storage

Keep from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Substances with Exposure Limits (Air/Biological)	Cal/OSHA- PEL	ACGIH® TLV®	EU	Other
Aluminum Oxide	5-mg/m³ TWA (respirable) 15-mg/m³ TWA (total dust)	None	None	UK: 4-mg/m³ TWA (respirable) 10-mg/m³ TWA (inhalable); Germany: 1.5-mg/m³ TWA (respirable) 4- mg/m³ TWA (inhalable); China: 4-mg/m³ TWA; DNEL long-term oral toxicity: 6.2-mg/kg, long- term inhalation toxicity: 15.6-mg/kg
Aluminum Nitrate	5-mg/m³ TWA (respirable) 15-mg/m³ TWA (total dust)	1-mg/m³ TWA (respirable)	None	None
Mineral Oil	None	None	None	None

8.2 Appropriate Engineering Controls

Air Concentration	Maintain air concentrations below occupational exposure standards.
Local Exhaust Ventilation	Use local exhaust when buffing.
Equipment Restrictions	Use in enclosed systems, where possible.
Handling Reduction	Wear gloves; use mechanical handling to reduce human contact.
Environmental Exposure Controls	No special considerations. Avoid release of material to surface waters.
Additional Information	Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash hands or exposed skin after using the product. Buffing with this product may release substances which require monitoring or control.

8.3 Individual Protection Measures and Personal Protective Equipment

Eye/Face Protection	Avoid eye contact. Wear safety glasses or face shield per ANSI/ISEA Z87.1-2015 "American National Standard for Occupational and Educational Personal Eye and Face Protection Devices".
Skin Protection	Avoid skin contact. Wear nitrile rubber protective gloves per ANSI/ISEA 105-2016 "American National Standard for Hand Protection Classification". Wear protective clothing per ISO 13688:2013 "Protective clothing General requirements" standard.
Respiratory Protection	Avoid breathing dusts, vapors, mists, or spray. Wear respirator per ANSI/ASSE Z88.2-2015 "Practices for Respiratory Protection" standard.
Hearing Protection	Wear hearing protection per CSA Z94.2-2014 "Hearing protection devices - Performance, selection, care, and use" standard, where operation is noisy.
Thermal Hazards	Wear protective gloves per BS EN 407:2004 "Protective gloves against thermal risks (heat and/or fire)" standard, where buffing generates sufficient heat.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES AND SAFETY CHARACTERISTICS

9.1 Physical/Chemical Properties

Physical State	Liquid
Color	Blue
Odor	Mild oily odor
Solubility	Complete in water
рН	5-7
Density or Relative Density	1.17@25°C
Boiling Point	100°C
Melting Point/Freezing Point	0°C (water); 2050°C (aluminum oxide)

No other information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity Not reactive.

10.2 Chemical Stability Product is stable at room temperature.

10.3 Possibility of Hazardous

Reactions

None known.

10.4 Conditions to Avoid None known.

10.5 Incompatible Materials Strong bases and oxidizing agents.

10.6 Hazardous Decomposition

Products

Carbon, aluminum, and nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Toxicological Health Hazards

	Acute Toxicity	Aluminum Oxide: LD50 oral rat >10000-mg/kg; LC50 inhalation rat >2.3-mg/L/4-hr. Aluminum Nitrate: LD50 oral rat 3622-mg/kg
	Skin	May cause abrasive skin irritation
	Corrosion/Irritation	
	Serious Eye Damage/Irritation	May cause irritation with redness and tearing.
	Respiratory or Skin Sensitization	No sensitization known from human experience.
	Germ Cell Mutagencity	No components have shown mutagenic activity.
	Carcinogenicity	None per ACGIH, IARC, NTP, OSHA or EU CLP.
	Reproductive Toxicity	Health effects information is not available.
	STOT-Single Exposure	Health effects information is not available.
	STOT-Repeated Exposure	Alumina refinery employee experience not associated with significant adverse respiratory effects.
	Aspiration Hazard	Mists may cause mild irritation to nose, throat, and upper respiratory tract.
11.2 Like	ly Routes of Exposure	Health effects information is not available.
Toxi	ptoms Related to cological racteristics	Health effects information is not available.
Chro	yed, Immediate, onic Effects of rt/Long Term Exposure	Health effects information is not available.
11.5 Num Toxi	nerical Meaures of city	Health effects information is not available.

11.6 Interactive Effects Health effects information is not available.

11.7 Where Specific Data Are Not

Available

Health effects information is not available. Generic data has

been applied, where possible.

11.8 Mixtures Health effects information is not available.

11.9 Mixture vs. Ingredient

Information

Health effects information is not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Aluminum Oxide: NOEC 96-hr Salmo trutta >100-mg/L; NOEC
	48-hr Daphnia magna >100-mg/L; NOEC 72-hr Selanastrum
	capricornutum >100-mg/L. Aluminum Nitrate: 96-hr LC50 Danio
	rerio >=1000-mg/L; 48-hr EC50 Daphnia magna 47.5-mg/L; 72-
	hr EC50 Pseudokirchnerella subcapitata 14-mg/L (structurally

similar chemical).

12.2 Persistence and Degradability Biodegradation is not applicable to inorganic substances.

12.3 Bioaccumulative PotentialNo specific data available. Product is not expected to

bioaccumulate in biological tissue.

12.4 Mobility in Soil No specific data available.

12.6 Other adverse effects None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal Methods

Safety of Persons	For the safety of persons conducting disposal, recycling, or reclamation activities, refer to information in section 8 (exposure controls and personal protection) of this SDS.
Proper Disposal	Packaging of product may contain small amounts of residual
	product which can be discarded.
Sewage Disposal	Many sewage treatment agencies responsible for wastewater
	treatment discourage or forbid disposal into sanitary sewers.
Landfill Precautions	Dispose of product in accordance with local, regional, and national regulations. Consult with waste contractor.

SECTION 14: TRANSPORT INFORMATION

14.1 UN Model Regulations

UN Number	Not listed; no action required.
UN Proper Shipping	Not regulated; no action required.
Name	

Transport Hazard Class(es)	Not listed; no action required.
Packing Group	Not listed; no action required.
Environmental Hazards	Information not available (N/A) or relevant.
Special Precautions for User	Information not available (N/A) or relevant.
Transport in Bulk per Annex II of MARPOL 73/78 & IBC Code	Not listed; no action required.

14.2 Intermodal Shipment Declarations

DOT FMCSA	Not listed; no action required.
ADR	Not listed; no action required.
IMO IMDG	Not listed; no action required.
IATA DGR	Not listed; no action required.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations

TSCA 21st	All components listed on the TSCA 8(b) inventory.
AICS	Components are regulated or listed by this regulation.
CEPA	All substances in product are listed on the DSL.
EINECS	Components are regulated or listed by this regulation.
SARA	Substance or mixture does not meet criteria for classification.
CERCLA	Not regulated; no action required.
RCRA	Not regulated; no action required.
REACH	Not listed; no action required.

SECTION 16: OTHER INFORMATION

16.1 Revision Date	Tue 3-Oct-2017 14:51
16.2 Revision Letter	B1
16.3 Revision Notes	A: Conversion to UN GHS 2017 SDS format B1: Improved precautions
16.4 Key/Legend Glossary of Terms Used	DOT FMCSA: US Department of Transportation Federal Motor Carrier Safety Administration {49 CFR §390 et seq.} 2017 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road {UN ECE/TRANS/42 (Vol I)} 2015 IMO IMDG: International Maritime Dangerous Goods Code {IMDG Code 2014 Edition (Amendment 37-14)} 2014 IATA DGR: International Air Transport Association Dangerous Goods Regulations {2017 DGR Regular 58th ed. (En.)} 2017 TSCA 21st: US Frank R. Lautenberg Chemical Safety for the 21st Century Act {15 USC §2601 et seq.} 2016

AICS: Australian Inventory of Chemical Substances (AICS) {Industrial Chemicals (Notification and Assessment) Act C2013C00643} 1989

CEPA: Canadian Environmental Protection Act {S.C. 1999, c. 33} 1999

EINECS: European INventory of Existing Commercial chemical Substances {Directive 67/548/EEC as amended by Directive 79/831/EEC per Commission Decision 81/437/EEC} 1990

SARA: US Superfund Amendments and Reauthorization Act {42 USC §9601 et seq.} 1986

CERCLA: US Comprehensive Environmental Response, Compensation, and Liability Act - Superfund {42 USC §9601 et seq.} 1980

RCRA: Resource Conservation and Recovery Act {40 CFR §§239-282} 2012

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006 amended by Commission Regulation (EU) 2017/999 and Commission Regulation (EU) 2017/1510} 2017

16.5 SDS Compliance

GHS: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS) {United Nations Economic Commission for Europe (UNECE) ST/SG/AC.10/30/Rev.7} 2017

OSHA: US Department of Labor Occupational Safety and Health Administration {Hazard Communication Standard (HCS) 29 CFR §1910.1200(g)} 2012

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006 amended by Commission Regulation (EU) 2017/999 and Commission Regulation (EU) 2017/1510} 2017

WHMIS: Canada Workplace Hazardous Materials Information System {SOR/2015-17} 2015

HMIS®: American Coatings Association^{sм} (ACA) Hazardous Materials Identification System (HMIS®) {HMIS® Implementation Manual, Fourth Edition} 2017

PICTOGRAM: United Nations Economic Commission for Europe (UNECE) Pictograms {URL: https://www.unece.org/trans/danger/publi/ghs/pictograms.html} 2017

16.6 Employer Responsibilities

Employers must ensure that Safety Data Sheets (SDS) for all hazardous chemicals in their workplace are readily accessible to Employees. SDS access and distribution should be considered for Consumers, Employees, former Employees, and Contractors. Employers should designate person(s) responsible for obtaining and maintaining SDS. If the Employer does not have an SDS, the Employer or designated person(s) should contact the Manufacturer to obtain a current version. Under the US OSHA Access to Employee Exposure and Medical Records standard {29 CFR §1910.1020}, Employers are required to keep a record of Employee exposure to hazardous materials at work. These "Employee exposure records" shall be retained 30+ years after their employment has ended.

16.7 SDS Distribution

Safety Data Sheets (SDS) must be distributed to direct Customers (distributors) at the time of first product shipment. When a SDS is updated, it must be sent with the next product shipment or within three (3) months of learning of "new or significant information". This SDS must be transmitted, stored, recovered, printed, rendered, and copied in its entirety (sections 1-16) and in full color to lawfully depict the branding, Hazard Pictograms, HMIS® ratings, and statements with emphasis.

16.8 Disclaimer

The information contained herein is considered the best available for compliance at the revision date. No warranty is expressed or implied regarding data accuracy. Use of this product is not within the control of the supplier; it is the user's obligation to determine the suitability of the product for its intended application and to assume all risk and liability for its safe use.

16.9 EMERGENCY

IF A PERSON HAS COLLAPSED, HAD A SEIZURE, HAS TROUBLE BREATHING, OR CANNOT BE AWAKENED, IMMEDIATELY CALL LOCAL EMERGENCY MEDICAL SERVICES (EMS).

REFER TO SDS SECTION 4, THE USA POISON HELP LINE AT 1-800-222-1222, OR USE POISONHELP.ORG

END OF SDS: BUFFING SOLUTION