

SAFETY DATA SHEET

1. Identification

Product identifier Other means of identification	PROTIVATE™PMZ Seed Nutritional None
Recommended use	Not available
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/	Distributor information
Manufacturer/Supplier	Koch Agronomic Services, LLC
	4111 E 37th St N
	Wichita, KS 67220 US
	kochmsds@kochind.com
	1.866.863.5550
Emergency	For Chemical Emergency
	Call CHEMTREC day or night
	USA/Canada - 1.800.424.9300
	Mexico - 1.800.681.9531
	Outside USA/Canada - 1.703.527.3887
	(collect calls accepted)

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Serious eye damage/eye irritation	Category 1
	Specific target organ toxicity, repeated exposure (inhalation)	Category 2 (Brain)
OSHA defined hazards	Combustible dust	
Label elements		
Signal word	Danger	
Hazard statement	May form combustible dust concentrations in air. Causes serious eye damage. May cause damage to organs (Brain) through prolonged or repeated exposure by inhalation.	
Precautionary statement		
Prevention	flames/hot surfaces No smoking. Keep con	sion hazard. Keep away from heat/sparks/open tainer tightly closed. Ground/bond container and ear eye protection/face protection. Observe good
Response	Immediately call a poison center/doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.	
Storage	Not assigned.	
Disposal	Dispose of contents/container in accordance	with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.	
Supplemental information	None.	

3. Composition/information on ingredients

Mixtures

Chemical name		CAS number	%
Monoammonium phosphate		7722-76-1	20 - 60
Zinc oxide		1314-13-2	20 - 40
Manganese sulfate monohydrat	e	10034-96-5	10 - 30
Vegetable wax		8015-86-9	5 - 10
Zinc sulfate monohydrate		7446-19-7	5 - 10
Composition comments	All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.		
	Hydrated forms of chemical substances an anhydrous form of the chemical substance		ry as mixtures. See tl
4. First-aid measures			
Inhalation	Move to fresh air. Call a physician if symp	toms develop or persist.	
Skin contact	Wash off with soap and water. Get medica	al attention if irritation develops ar	nd persists.
Eye contact	Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.		
Ingestion	Rinse mouth. Get medical attention if symptoms occur.		
Most important symptoms/effects, acute and delayed	Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Prolonged exposure may cause chronic effects.		
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.		
General information	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.		
5. Fire-fighting measures			
Suitable extinguishing media	Avoid high pressure media which could ca mixture. Water fog. Foam. Dry chemical po carefully to avoid creating airborne dust.		
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as	s this will spread the fire.	
Specific hazards arising from the chemical	Explosion hazard: Avoid generating dust; in the presence of an ignition source is a p hazardous to health may be formed.		
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and fu	Il protective clothing must be wor	n in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not brease without risk.	athe fumes. Move containers fron	n fire area if you can o
Specific methods	Use standard firefighting procedures and o	consider the hazards of other invo	lved materials.
General fire hazards	May form combustible dust concentrations	s in air.	

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Use only non-sparking tools. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Do not breathe dust. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Collect dust using a vacuum cleaner equipped with HEPA filter. Prevent product from entering drains. Stop the flow of material, if this is without risk.
	Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.
	Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces No smoking. Combustible dust clouds may be created where operations produce fine material (dust). Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654). Explosion-proof general and local exhaust ventilation. Do not breathe dust. Do not get this material in contact with eyes. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
Manganese sulfate monohydrate (CAS 10034-96-5)	Ceiling	5 mg/m3	
Zinc oxide (CAS 1314-13-2)	PEL	5 mg/m3	Fume.
		5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
US. OSHA Table Z-3 Permissible E Components	xposure Limits (PEL) for Mine Type	eral Dusts (29 CFR 1910.1000) Value	Form
Zinc oxide (CAS 1314-13-2)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
US. ACGIH Threshold Limit Values Components	· · ·	Value	Form
	Туре		Inhalable fraction.
Manganese sulfate monohydrate (CAS 10034-96-5)	TWA	0.1 mg/m3	
		0.02 mg/m^2	Poonirable fraction
		0.02 mg/m3	Respirable fraction.
Zinc oxide (CAS 1314-13-2)	STEL	10 mg/m3	Respirable fraction. Respirable fraction.

Components	rous to Life or Health (IDLH) Values, a Type	Value	
Manganese sulfate monohydrate (CAS 10034-96-5)	IDLH	500 mg/m3	
Zinc oxide (CAS 1314-13-2)	IDLH	500 mg/m3	
US. NIOSH: Pocket Guide to	o Chemical Hazards		
Components	Туре	Value	Form
Manganese sulfate monohydrate (CAS 10034-96-5)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.
Zinc oxide (CAS 1314-13-2)	Ceiling	15 mg/m3	Dust.
	STEL	10 mg/m3	Fume.
	TWA	5 mg/m3	Dust.
		5 mg/m3	Fume.
ological limit values	No biological exposure limits noted fo	r the ingredient(s).	
	relief vents or an explosion suppressi- dust-handling systems (such as exha- equipment) are designed in a manner is no leakage from the equipment). If concentrations of dust particulates be respiratory protection must be worn. U powered industrial trucks. Provide eye	ust ducts, dust collectors, ves to prevent the escape of dus engineering measures are no low the Occupational Exposu Jse only appropriately classifi	ssels, and processing st into the work area (i.e., the ot sufficient to maintain rre Limit (OEL), suitable
-	such as personal protective equipme	ent	
Eye/face protection	Wear approved safety goggles.		
Skin protection Hand protection	Wear appropriate chemical resistant g	ploves.	
Skin protection Other	Wear suitable protective clothing. Use of an impervious apron is recommended.		
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Chemical respirator with organic vapor cartridge, full facepiece, dust and mist filter.		
Thermal hazards	Wear appropriate thermal protective of	lothing, when necessary.	
neral hygiene nsiderations	When using, do not eat, drink or smol as washing after handling the materia work clothing and protective equipme	I and before eating, drinking,	
Physical and chemical	properties		
pearance			
Physical state	Solid.		
_	Doudor		

Physical state	Solid.
Form	Powder.
Color	Beige.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling	Not available.
range	
Flash point	Not available.
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Evaporation rate	Not available.
Flammability (solid, gas)	Fine particles may form explosive mixtures with air.
Upper/lower flammability or exp	losive limits
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
10 Stability and reactivity	

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, sparks and open flame. Contact with incompatible materials. Minimize dust generation and accumulation.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Causes serious eye damage.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Prolonged exposure may cause chronic effects.

Information on toxicological effects

Acute toxicity		
Components		
Manganese sulfate mono	hydrate (CAS 10034-96-5)	
Acute		
Oral		
LD50	Rat	2150 mg/kg
Zinc oxide (CAS 1314-13	-2)	
Acute		
Dermal		
LD50	Rat	2000 mg/kg

Components	Species	Test Results	
Inhalation			
LC50	Rat	1.68 - 5.7 mg/l, 4 hours	
Oral			
LD50	Mouse	2000 - 5000 mg/kg	
	Rat	2000 - 5000 mg/kg	
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation	n.	
Serious eye damage/eye irritation	Causes serious eye damage.		
Respiratory or skin sensitization	1		
Respiratory sensitization	Not a respiratory sensitizer.		
Skin sensitization	This product is not expected to cause skin sensitization.		
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.		
Carcinogenicity	Not classifiable as to carcinogenicity to humans.		
IARC Monographs. Overall	Evaluation of Carcinogenicity		
Not listed.			
NTP Report on Carcinogens	3		
Not listed.	d Substances (29 CFR 1910.1001-1053)		
Not listed.	a Substances (29 CFR 1910.1001-1053)		
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.		
Specific target organ toxicity - single exposure	Not classified.		
Specific target organ toxicity - repeated exposure	May cause damage to organs (Brain) through prolonged or repeated exposure by inhalation.		
Aspiration hazard	Not an aspiration hazard.		
Chronic effects	Prolonged inhalation may be harmful. May cause da repeated exposure.	mage to organs through prolonged or	

12. Ecological information

toxicity	Very toxic	to aquatic life with long lasting effects.		
Components		Species	Test Results	
Zinc oxide (CAS 1314	-13-2)			
Aquatic				
Algae	EC50	Algae	> 0.69 - < 4.55 mg/l, 24 hours	
			> 0.3 - < 1.94 mg/l, 96 hours	
	NOEC	Algae	1.071 mg/l, 16 days	
Acute				
Crustacea	EC50	Aquatic Invertebrates	> 1.27 - < 1.92 mg/l, 4 hours	
			> 0.155 - < 100 mg/l, 48 hours	
			> 0.14 - < 6 mg/l, 24 hours	
			> 0.072 - < 0.103 mg/l, 96 hours	
	LC50	Aquatic Invertebrates	> 0.37 - < 1.19 mg/l, 96 hours	
Fish	EC50	Fish	> 2.065 - < 2.966 mg/l, 85 hours	
	LC50	Fish	23.06 mg/l, 84 hours	
			0.33 mg/l, 95 hours	
			> 0.112 - < 8.062 mg/l, 96 hours	
Zinc sulfate monohydr	ate (CAS 7446-19-	7)		
Aquatic				
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	0.06 mg/l, 48 hours	

Components		Species	Test Results
Fish	LC50	Hirame, flounder (Paralichthys olivaceus)	< 10 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of this product.		
Bioaccumulative potential	No data available.		
Mobility in soil	No data available.		
Other adverse effects	No data available.		

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT	
UN number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Zinc oxide, Zinc sulfate monohydrate)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
	DOT (Road/Rail): Non-bulk shipments of this material are non-regulated for domestic ground transportation when they meet the requirements of 49 CFR 171.4(c).
Special provisions	8, 146, 335, A112, B54, B120, IB8, IP3, N20, T1, TP33
Packaging exceptions	155
Packaging non bulk	213
Packaging bulk	240
ΙΑΤΑ	
UN number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Zinc oxide, Zinc sulfate monohydrate)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	
Environmental hazards	Yes
ERG Code	9L
	Read safety instructions, SDS and emergency procedures before handling.
IMDG	
UN number	UN3077
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide, Zinc sulfate monohydrate)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	
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Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.	ons, SDS and emergend	y procedures before handling.	
15. Regulatory informatio	n			
US federal regulations	This product is a "Ha Standard, 29 CFR 19		efined by the OSHA Hazard Communicatio	n
TSCA Section 12(b) Ex	port Notification (40 C	FR 707, Subpt. D)		
Not regulated. CERCLA Hazardous Sι	ubstance List (40 CFR	302.4)		
Zinc oxide (CAS 13 ²		34-96-5) Listed. Listed.		
SARA 304 Emergency	release notification			
Not regulated. OSHA Specifically Reg Not listed.	ulated Substances (29	OFR 1910.1001-1053)		
Toxic Substances Control	Act (TSCA)	All components of the "active".	e mixture on the TSCA 8(b) inventory are de	esignated
Superfund Amendments and Re SARA 302 Extremely hazar Not listed.				
SARA 311/312 Hazardous chemical	Yes			
Classified hazard categories	Combustible dust Serious eye damage	or eve irritation		
categories	Specific target organ	toxicity (single or repeat	ted exposure)	
SARA 313 (TRI reporting) Chemical name	Specific target organ		ted exposure) % by wt.	
SARA 313 (TRI reporting)		toxicity (single or repea	% by wt. 10 - 30	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide	phydrate	toxicity (single or repeat CAS number 10034-96-5 1314-13-2	% by wt. 10 - 30 20 - 40	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate	phydrate	toxicity (single or repeating toxicity (single or repeating toxic) of the second secon	% by wt. 10 - 30	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate Other federal regulations	ohydrate e	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7	% by wt. 10 - 30 20 - 40	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate	ohydrate e n 112 Hazardous Air P	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7 Pollutants (HAPs) List	% by wt. 10 - 30 20 - 40	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate Other federal regulations Clean Air Act (CAA) Section Manganese sulfate mono Clean Air Act (CAA) Section	ohydrate e n 112 Hazardous Air P ohydrate (CAS 10034-9	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7 Pollutants (HAPs) List 6-5)	% by wt. 10 - 30 20 - 40 5 - 10	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate Other federal regulations Clean Air Act (CAA) Section Manganese sulfate mono	ohydrate e n 112 Hazardous Air P ohydrate (CAS 10034-9	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7 Pollutants (HAPs) List 6-5)	% by wt. 10 - 30 20 - 40 5 - 10	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate Other federal regulations Clean Air Act (CAA) Section Manganese sulfate mono Clean Air Act (CAA) Section Not regulated. Safe Drinking Water Act (SDWA)	ohydrate e n 112 Hazardous Air P ohydrate (CAS 10034-9 n 112(r) Accidental Re	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7 Pollutants (HAPs) List 6-5)	% by wt. 10 - 30 20 - 40 5 - 10	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate Other federal regulations Clean Air Act (CAA) Section Manganese sulfate mono Clean Air Act (CAA) Section Not regulated. Safe Drinking Water Act	ohydrate e n 112 Hazardous Air P ohydrate (CAS 10034-9 n 112(r) Accidental Re Not regulated.	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7 Pollutants (HAPs) List 6-5)	% by wt. 10 - 30 20 - 40 5 - 10	
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SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate Other federal regulations Clean Air Act (CAA) Section Manganese sulfate mono Clean Air Act (CAA) Section Not regulated. Safe Drinking Water Act (SDWA) US state regulations US. Massachusetts RTK - S Zinc oxide (CAS 1314-13 Zinc sulfate monohydrate US. New Jersey Worker and Manganese sulfate mono Zinc oxide (CAS 1314-13 Zinc sulfate monohydrate	ohydrate e n 112 Hazardous Air P ohydrate (CAS 10034-9 n 112(r) Accidental Re Not regulated. Substance List 3-2) e (CAS 7446-19-7) d Community Right-to ohydrate (CAS 10034-9 3-2) e (CAS 7446-19-7)	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7 collutants (HAPs) List 6-5) lease Prevention (40 C -Know Act 6-5)	% by wt. 10 - 30 20 - 40 5 - 10	
SARA 313 (TRI reporting) Chemical name Manganese sulfate mono Zinc oxide Zinc sulfate monohydrate Other federal regulations Clean Air Act (CAA) Section Manganese sulfate mono Clean Air Act (CAA) Section Not regulated. Safe Drinking Water Act (SDWA) US state regulations US. Massachusetts RTK - S Zinc oxide (CAS 1314-13 Zinc sulfate monohydrate US. New Jersey Worker and Manganese sulfate mono Zinc oxide (CAS 1314-13 Zinc sulfate monohydrate US. Pennsylvania Worker a Manganese sulfate mono Zinc oxide (CAS 1314-13	ohydrate e n 112 Hazardous Air P ohydrate (CAS 10034-9 n 112(r) Accidental Re Not regulated. Substance List 3-2) e (CAS 7446-19-7) d Community Right-to ohydrate (CAS 10034-9 3-2) e (CAS 7446-19-7) nd Community Right-fo ohydrate (CAS 10034-9 3-2)	toxicity (single or repeat CAS number 10034-96-5 1314-13-2 7446-19-7 rollutants (HAPs) List 6-5) lease Prevention (40 C -Know Act 6-5) to-Know Law	% by wt. 10 - 30 20 - 40 5 - 10	
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California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	18-September-2023
Revision date	-
Version #	01
Further information	Refer to: OSHA 3371-08 2009, Hazard Communication Guidance for Combustible Dusts NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids
HMIS® ratings	Health: 3* Flammability: 2 Physical hazard: 0
NFPA ratings	3 0
Disclaimer	NOTICE: The information contained in this document is based on data considered to be accurate as of the preparation date of this Safety Data Sheet (SDS) and was prepared pursuant to applicable Government regulation(s). This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the above data and safety information, nor is any authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in

authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided about any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. Purchasers and users of the product are responsible for determining that this product is suitable for the intended use and application. No responsibility can be assumed by vendor for any damage or injury resulting from failure to adhere to recommended uses, or from any hazards inherent to the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product should explicitly advise their employees, agents, contractors and customers who will use the product of this SDS.