SAFETY DATA SHEET

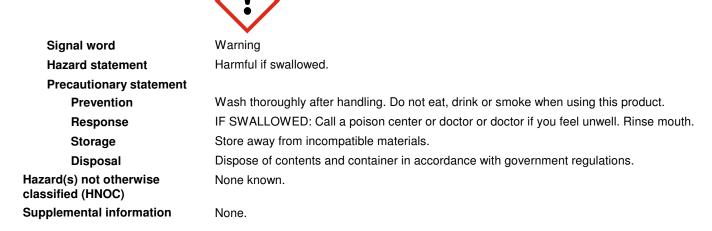


1. Identification

Due doot identifien		
Product identifier	NUBARK MANCOZEB PSP	
Other means of identification	None.	
Recommended use	Ag Product - Crop Protection	
Recommended restrictions	None known.	
Manufacturer/Importer/Supplier/Distributor information		
Manufacturer		
Company name	Wilbur-Ellis Company LLC	
Address	16300 Christensen Rd. Ste 135	
	Tukwila, WA 98188	
	United States	
Telephone	Branded Products Information	(800) 500-1698
E-mail	SDS@wilburellis.com	
Emergency phone number	Chemtrec - Domestic	(800) 424-9300
	Chemtrec - International	+1 703-741-5970

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	
Label elements		
	$\mathbf{\wedge}$	



3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Talc-Anhydrous Magnesiur	n silicate	14807-96-6	40 - < 50
Douglas Fir Bark		Mixture	20 - < 30
Gypsum		13397-24-5	20 - < 30
Mancozeb		8018-01-7	5 - < 10
Kaolin		1332-58-7	1 - < 3
Other components below r	eportable levels		1 - < 3
Percentage ranges of compos	sition to protect confidentiality or due to batch variat	ion.	

Material name: NUBARK MANCOZEB PSP692Version #: 02Revision date: 09-26-2017Issue date: 02-23-2016

4. First-aid measures

Inhalation	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs Get medical attention if you feel unwell.
Most important symptoms/effects, acute and delayed	Upper respiratory tract irritation. Irritation of eyes and mucous membranes. Coughing.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material. 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	Stop the flow of material, if this is without risk. If sweeping of a contaminated area is necessary use a dust suppressant agent which does not react with the product. Collect dust using a vacuum cleaner equipped with HEPA filter. Minimize dust generation and accumulation. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
7. Handling and storage	
Precautions for safe handling	Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store in a 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 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Туре	Value	Form
Gypsum (CAS 13397-24-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

Components	or Air Contaminants (29 CFR 1910.1000 Type	Value	Form
Kaolin (CAS 1332-58-7)	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.
Mancozeb (CAS 8018-01-7)	Ceiling	5 mg/m3	
US. OSHA Table Z-3 (29 CFF	8 1910.1000)		
Components	Туре	Value	Form
Talc-Anhydrous Magnesium silicate (CAS 14807-96-6)	TWA	0.3 mg/m3	Total dust.
		0.1 mg/m3	Respirable.
		20 mppcf	
		2.4 mppcf	Respirable.
US. ACGIH Threshold Limit		Value	Form
Components	Туре	Value	Form
Gypsum (CAS 13397-24-5)	TWA	10 mg/m3	Inhalable fraction.
Kaolin (CAS 1332-58-7)	TWA	2 mg/m3	Respirable fraction.
Talc-Anhydrous Magnesium silicate (CAS 14807-96-6)	TWA	2 mg/m3	Respirable fraction.
US. NIOSH: Pocket Guide to	Chemical Hazards		
Components	Туре	Value	Form
Gypsum (CAS 13397-24-5)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Kaolin (CAS 1332-58-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Mancozeb (CAS 8018-01-7)	STEL	3 mg/m3	Fume.
	TWA	1 mg/m3	Fume.
Talc-Anhydrous Magnesium silicate (CAS 14807-96-6)	TWA	2 mg/m3	Respirable.
	al Exposure Level (WEEL) Guides		
Components	Туре	Value	Form
Mancozeb (CAS 8018-01-7)	TWA	1 mg/m3	Total dust.
logical limit values	No biological exposure limits noted for th	e ingredient(s).	
propriate engineering trols	Good general ventilation (typically 10 air should be matched to conditions. If appli or other engineering controls to maintain exposure limits have not been establishe Ventilation should be sufficient to effectiv that may be generated during handling o sufficient to maintain concentrations of d (OEL), suitable respiratory protection mu	cable, use process enclose airborne levels below reco ed, maintain airborne levels yely remove and prevent bu r thermal processing. If en ust particulates below the st be worn.	ures, local exhaust ventilation commended exposure limits. Is to an acceptable level. uildup of any dusts or fumes gineering measures are not
vidual protection measures, Eye/face protection	such as personal protective equipment Face shield is recommended. Use tight f		erated.
Skin protection			
Hand protection	Wear appropriate chemical resistant glov	ves.	
Other	Wear suitable protective clothing.		
Respiratory protection	Use a NIOSH/MSHA approved respirator exceeding the exposure limits.	r if there is a risk of exposu	re to dust/fume at levels
Thermal hazards	Wear appropriate thermal protective clot	hing, when necessary.	
eral hygiene siderations	Keep away from food and drink. Always of washing after handling the material and b work clothing and protective equipment t	before eating, drinking, and	

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Powder.
Color	Not available.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	377.6 °F (192 °C) estimated
Initial boiling point and boiling range	Not available.
Flash point	280.0 °F (137.8 °C) estimated
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.00001 hPa estimated
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	
Density	2.63 g/cm3 estimated
Flammability class	Combustible IIIB estimated
Specific gravity	2.63 estimated
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.

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Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials	Aluminum.
Hazardous decomposition products	Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Inhalation of dusts may cause respiratory irritation. Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Dust in the eyes will cause irritation.
Ingestion	Harmful if swallowed.

Symptoms related to the physical, chemical and	Irritation of eyes and mucous membranes. Upper respiratory tract irritation. Coughing.
toxicological characteristics	
Information on toxicological effe	ects

Acute toxicity	Harmful if swallowed.	
Components	Species	Test Results
Gypsum (CAS 13397-24-5)		
Acute		
Oral		
LD50	Rat	> 1581 mg/kg
* Estimates for product may I	be based on additional component da	ta not shown.
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.	
Respiratory or skin sensitizatio	n	
Respiratory sensitization	Not available.	
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	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.	
IARC Monographs. Overall	Evaluation of Carcinogenicity	
	ium silicate (CAS 14807-96-6) 2B	Possibly carcinogenic to humans. Iot classifiable as to carcinogenicity to humans.
OSHA Specifically Regulate	ed Substances (29 CFR 1910.1001-1	- ·
Not regulated.		
US. National Toxicology Pr	ogram (NTP) Report on Carcinoger	IS
Not listed.		
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	Not classified.	
Aspiration hazard	Not available.	
Chronic effects	Prolonged inhalation may be harmful.	
12. Ecological information	า	
Ecotoxicity	The product is not classified as en	vironmentally hazardous. However, this does not exclude the ills can have a harmful or damaging effect on the environment
Persistence and degradability	No data is available on the degrad	ability of this product.
Bioaccumulative potential	No data available.	
Mobility in soil	No data available.	
Other adverse effects		fects (e.g. ozone depletion, photochemical ozone creation bal warming potential) are expected from this component.
13. Disposal consideratio	ns	
Disposal instructions		ealed containers at licensed waste disposal site. Dispose of new with government regulations.
Local disposal regulations	Dispose in accordance with all app	
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).	

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings, if applicable, even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

ΙΑΤΑ

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Not applicable. Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals.

This product is exempted from TSCA because it is solely for FIFRA regulated use.

Listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Mancozeb (CAS 8018-01-7)

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous No chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Mancozeb (CAS 8018-01-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Talc-Anhydrous Magnesium silicate (CAS 14807-96-6)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Mancozeb (CAS 8018-01-7)

Listed: January 1, 1990

International Inventories

Country(s) or region Inventory name

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

On inventory (yes/no)*

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	02-23-2016
Revision date	09-26-2017
Version #	02
NFPA ratings	Health: 2 Flammability: 0 Instability: 0
NFPA ratings	

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