

MATERIAL SAFETY DATA SHEET

REVISION NO.: 0
MSDS DATE: 2/10/12

OZARK
MATERIALS, LLC

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Ozark Materials, LLC- White Thermoplastic
SYNONYMS:
PRODUCT CODES:

MANUFACTURER: Ozark Materials, LLC
DIVISION:
ADDRESS: 848 Sprott Road, Montgomery, AL 36117

EMERGENCY PHONE: 601-954-9576
CHEMTREC PHONE:
OTHER CALLS:
FAX PHONE:

CHEMICAL NAME:
CHEMICAL FAMILY: Modified glycerol ester of rosin
CHEMICAL FORMULA:

PRODUCT USE: Thermoplastic Road Marking Compound
PREPARED BY:

SECTION 1 NOTES:

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:

CAS NO.	% WT	EXPOSURE LIMITS	SARA 313 REPORTABLE
1317-65-3	30-45	OSHA PEL-TWA (Respirable dust): 5mg/m ³ OSHA PEL-TWA (Total dust): 15mg/m ³ NIOSH TWA (Total dust): 10 mg/m ³	N/A
CAS NO.	% WT	EXPOSURE LIMITS	SARA 313 REPORTABLE
13463-67-7	5-12	OSHA PEL-TWA (Total dust): 15 mg/m ³ NIOSH TWA (Total dust): 10 mg/m ³	N/A

SECTION 2 NOTES:

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

ROUTES OF ENTRY: Inhalation, Contact

POTENTIAL HEALTH EFFECTS

EYES: Avoid eye contact.

SKIN: Thermal burns may occur from molten material.

INGESTION: Do not ingest.

INHALATION: Excessive inhalation of dust from powdered material may result in respiratory tract irritation.

ACUTE HEALTH HAZARDS: Respiratory tract irritation, thermal burns from molten material.

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CHRONIC HEALTH HAZARDS: Thermal burns from molten material.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Not determined.

CARCINOGENICITY

OSHA:

N/A

ACGIH:

NTP:

IARC:

OTHER:

SECTION 3 NOTES:

SECTION 4: FIRST AID MEASURES

EYES: Consult a physician if material gets into eyes.

SKIN: Cool affected area as soon as possible in cold water; be sure to leave plastic in place. Place furacin soluble dressing on plastic and surrounding area. Cover affected area with protective bandage. Consult a physician in case of a severe burn.

INGESTION: Consult a physician in case material is ingested.

INHALATION: Consult a physician if respiratory tract irritation occurs.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: None

SECTION 4 NOTES:

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: Not determined
(% BY VOLUME) LOWER: Not determined

FLASH POINT:

F: > 475

C: > 246.11

METHOD USED: Closed Cup

AUTOIGNITION TEMPERATURE:

F: Not determined

C: Not determined

NFPA HAZARD CLASSIFICATION

HEALTH: 1

FLAMMABILITY: 1

REACTIVITY: 0

OTHER:

HMIS HAZARD CLASSIFICATION

HEALTH: 1

FLAMMABILITY: 1

REACTIVITY: 0

PROTECTION:

EXTINGUISHING MEDIA: Water spray, dry chemical, CO₂, Foam

SPECIAL FIRE FIGHTING PROCEDURES: Avoid direct contact with water to avoid splattering of molten plastic.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide.

SECTION 5 NOTES: Polymerization will not occur.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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ACCIDENTAL RELEASE MEASURES: Granular material may be scooped up or swept. Allow molten material to cool and then dispose of in accordance with Federal, State and Local Regulations.

SECTION 6 NOTES:

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Keep in a ventilated area when possible and avoid inhaling dust particles.

OTHER PRECAUTIONS: Not determined

SECTION 7 NOTES:

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Not determined

VENTILATION : Local exhaust recommended when generating excessive levels of airborne dust/vapors when heating plastic.

RESPIRATORY PROTECTION: Use approved NIOSH respirator.

EYE PROTECTION: Safety glasses; Eye goggles covered with face shield when handling molten plastic.

SKIN PROTECTION: Heat resistant protective clothing and gloves when handling molten plastic.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Always carry first aid kit, water and ice during application.

WORK HYGIENIC PRACTICES: Always wash hands after use and before eating, drinking or any other personal activity.

EXPOSURE GUIDELINES: Not determined

SECTION 8 NOTES:

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Granular

ODOR: Alkyd oil

PHYSICAL STATE: Solid

pH AS SUPPLIED: Not determined

pH (Other):

BOILING POINT: N/A

F:

C:

MELTING POINT:

F: 200

C: 93 min

FREEZING POINT: N/A

F:

C:

VAPOR PRESSURE (mmHg): N/A

@

F:

C:

VAPOR DENSITY (AIR = 1): N/A

@

F: 2

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C:
SPECIFIC GRAVITY (H₂O = 1): 2.3 max
@

F:
C:
EVAPORATION RATE: N/A

BASIS (=1):

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (con't)

SOLUBILITY IN WATER: Negligible

PERCENT SOLIDS BY WEIGHT: Not determined

PERCENT VOLATILE: Negligible
BY WT/ BY VOL @

F:
C:
VOLATILE ORGANIC COMPOUNDS (VOC): Not determined

WITH WATER: LBS/GAL
WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT: Not determined
VISCOSITY:

@
F:
C:

SECTION 9 NOTES:

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABLE

STABILITY: < 475 °F

CONDITIONS TO AVOID (STABILITY): Temperatures above 500 °F

INCOMPATIBILITY (MATERIAL TO AVOID): Acids, alum, ammonium salts, mercury & hydrogen, fluorine, magnesium

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Carbon Monoxide, Carbon Dioxide

HAZARDOUS POLYMERIZATION: None

CONDITIONS TO AVOID (POLYMERIZATION): None

SECTION 10 NOTES:

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Not determined

SECTION 11 NOTES:

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Not determined

SECTION 12 NOTES:

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with applicable Federal, State and Local Regulations.

RCRA HAZARD CLASS: N/A

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SECTION 13 NOTES:

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
PROPER SHIPPING NAME: Not Regulated
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENT:

WATER TRANSPORTATION
PROPER SHIPPING NAME: N/A
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

AIR TRANSPORTATION
PROPER SHIPPING NAME: N/A
HAZARD CLASS:
ID NUMBER:
PACKING GROUP:
LABEL STATEMENTS:

OTHER AGENCIES: Not determined

SECTION 14 NOTES:

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): All components of this product are in compliance with the TSCA inventory requirements.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): N/A

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):

311/312 HAZARD CATEGORIES: Fire, Acute, Delayed

313 REPORTABLE INGREDIENTS: None

STATE REGULATIONS: None known

INTERNATIONAL REGULATIONS: N/A

SECTION 15 NOTES:

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: None

PREPARATION INFORMATION: Prepared 02/10/12

DISCLAIMER: The information herein is given in good faith and believed current as of the date of this MSDS. Because of conditions of use are beyond our control, no guarantee, representation or warranty expressed or implied is made. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of this product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Consult Ozark Materials, LLC for further information.

MATERIALS, LLC

848 Sprott Road, Montgomery, AL 36117

Phone: 334-213-2995 Fax: 334-277-6575

Test Report

Material: Ozark Materials, LLC Thermoplastic
Specification: White Granular TX Spec. Alkyd Spray
Product Number: 11205-00
Batch Number: 210813W-4

<u>TEST METHODS</u>	<u>SPECIFICATION</u>	<u>RESULT</u>
Specific Gravity	2.15 max.	2.08
Composition		
Binder Content	20% min.	20.3%
Glass Bead Content	30-45%	31.4%
Titanium Dioxide Pigment	12-15% min.	12.7%
Calcium Carbonate Filler	42% max.	35.5%
Physical Characteristics		
Color, after 4 hrs. @ 425° F	DMS-8220	Pass
Reflectance (Cap Y)	65% min.	84.5%
Softening Point	200 - 230 F	217
Impact Resistance	10 in. lbs. min.	10.3
Yellow Index	0.12 max	0.09
Cracking Resistance at Low Temp.	No Cracks	Pass
Flowability (4 hrs)	18% retained max.	11.4%
Extended Flowability (8 hrs)	28% retained max.	18.7%
Drying Time	<2 minutes @50 F	< 2 min.
	<10 minutes @90 F	<10 min.
Storage Life	One Year	Pass
Glass Beads - AASHTO M247, Type I		
<i>Sieve</i>	<i>Percent Passing</i>	
20	100	100%
30	75-95	81.4%
50	15-35	24.2%
100	0-5	1.0%
Roundness	70% Min.	71.5%
Refractive Index	1.50	1.5

I certify to the best of my knowledge that this material complies with all requirements of the AASHTO Specification M249-09 for Thermoplastic Striping Compound

Subscribed and Sworn to before me this 18 day of November 2013.

Ozark Materials, LLC

Jennifer B. Johnson
Notary Public

Heather D. Whent
Representative