

ND INDUSTRIES, INC. **1893 BARRETT ROAD** TROY, MICHIGAN 48084

(248) 288-0000 Fax: (248) 288-0022 24 hr. EMERGENCY CHEMTREC:

1-800-424-9300

PRODUCT: ND EM-223 Expandables

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MSDS ID: ND3068 ORIG. DATE: 02/26/2002 REV. DATE: 4/20/05

REV. DATE: 12/18/08 PREPARED BY: Chemical Safety

R: 0

PPE: B

H: 1 SECTION I -Material Identification and Information

COMPONENTS		CAS #	PERCENT %	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Calcium carbonate	EM-12-73	mixture	40-50	n.e.	n.e.	
Calcium silicate	EM-12-485	mixture	10-20	n.e.	n.e.	
Paraffinic oil	EM-12-566	64742-58-1	5-10	n.e.	n.e.	
Rubber	EM-12-52	mixture	5-10	n.e.	n.e.	
Aromatic hydrocarbon resin	EM-12-300	mixture	10-15	n.e.	n.e.	
Blowing agent	EM-12-55	80-51-3	<1	n.e.	n.e.	
Pigment	EM-12-119	1333-86-4	< 0.7	3.5 mg/m ³	3.5 mg/m ³	Dust

The remaining components of this product are not considered hazardous substances or are below reportable levels under OSHA's Hazard Communication Standard (29 CFR 1910.1200)

All ingredients are listed on the TSCA Inventory.

n.a.= not applicable / n.e.=not established

SECTION II -Physical and Chemical Characteristics

BOILING POINT: n.a.

VAPOR DENSITY: n.a. air = 1

VOC #/US gal. : **DENSITY OF COATING:**

VAPOR PRESSURE: n.a.

MELTING POINT: n.a.

SPECIFIC GRAVITY: 1.25 water = 1

EVAPORATION RATE: n.a. WATER REACTIVE: n.a.

SOLUBILITY IN WATER: Insoluble

APPEARANCE AND ODOR: Off-white solid with a rubber-like odor.

SECTION III - Fire and Explosion Hazard Data

FLASH POINT: >200° C

AUTOIGNITION TEMPERATURE: Not determined

UEL: n.a. FLAMMABILITY LIMITS % IN AIR: LEL: n.a.

EXTINGUISHER MEDIA: Fine water spray, Carbon dioxide, or foam.

SPECIAL FIREFIGHTING PROCEDURES:

Full emergency equipment with self-contained breathing apparatus should be worn by firefighters. Irritating and toxic gases may be generated by thermal decomposition and combustion. Watch footing on floors and stairs for

possible melting and spreading.

UNUSUAL FIRE HAZARDS AND CONDITIONS TO

Heavy water spray on molten material may scatter and spread fire.

AVOID:

MATERIAL SAFETY DATA SHEET

PRODUCT: ND EM-223 Expandables

SECTION IV - Reactivity Hazard Data

STABILITY: stable: X unstable:

HAZARDOUS POLYMERIZATION: may occur: will not occur: X

CONDITIONS

Avoid excessive heat.

TO AVOID:

INCOMPATIBILITY: Avoid strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Depending on fire condition, the ingredients may produce Carbon monoxide, Carbon dioxide and other combustible gases.

SECTION V - Health Hazard Data

PRIMARY ROUTES OF ENTRY: INHALATION: INGESTION: X SKIN ABSORPTION:

EYE CONTACT: Not likely to occur in product form.

FIRST AID: If particulate enters the eye, remove the particulate and flush with water. Seek medical attention if irritation

develops.

SKIN Not applicable in solid form.

CONTACT:

FIRST AID:

INHALATION: Not applicable in solid form.

FIRST AID:

INGESTION: Not likely to occur in product form.

FIRST AID: If swallowed, get medical attention.

CHRONIC

Not known

EFFECTS:

Carcinogenic: None of the components as present in the product are listed as carcinogenic.

MATERIAL SAFETY DATA SHEET

PRODUCT: **ND EM-223 Expandables**

Component Oral LD50 **Dermal LD50** Inhalation LC50 not determined Calcium carbonate not determined not determined not determined Calcium silicate not determined not determined not determined Paraffinic oil not determined not determined not determined not determined Rubber not determined not determined not determined Aromatic hydrocarbon resin not determined not determined not determined Blowing agent not determined not determined not determined **Pigment** not determined

SECTION VI - Control and Protective Measures

RESPIRATORY As supplied, not necessary.

PROTECTION:

PROTECTIVE Not essential. Use nitrile if conditions warrant.

GLOVES:

EYE PROTECTION: Always wear safety glasses when working with material - Wear NIOSH approved safety glasses.

LOCAL EXHAUST: X **MECHANICAL:** SPECIFIC: VENTILATION

TO BE USED: OTHER (specify): n.a.

PROTECTIVE CLOTHING

AND EQUIPMENT:

As supplied, this product should not require protective clothing.

Always practice good personal hygiene when working with chemicals. Be sure to wash hands after **HYGIENIC WORK**

PRACTICES: using product.

SECTION VII - Precautions for Safe Handling and Spill/Leak Procedures

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:

Sweep up solid material and dispose of properly.

WASTE DISPOSAL

Dispose of material in accordance with local, state, and federal regulations.

METHODS:

SAFE HANDLING

AND STORAGE:

Avoid excessive heat.

OTHER PRECAUTIONS AND SPECIAL HAZARDOUS INFORMATION:

n.a.

RECOMMENDED NFPA/HMIS

RATING

HEALTH

FLAMMABILITY

REACTIVITY

PERSONAL PROTECTION

В

note: ratings may differ according to application, environment, and physical state.

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MATERIAL SAFETY DATA SHEET

PRODUCT:	ND EM-223	Expandables
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DOT Shipping name: Not Regulated

(ND EM223 Type 2 Expandables)

SECTION 313 SUPPLIER NOTIFICATION

Detaching this notification from the Material Safety Data Sheet is prohibited by law and any copying or distribution of same requires this attachment be included.

This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

CAS #	CHEMICAL NAME	% BY WEIGHT
1314-13-2	Zinc oxide	.6%
	Zinc compounds	.6%

This product contains the following materials that under California Proposition 65 of the Safe Drinking Water and Toxic Enforcement Act of 1986 are recognized to cause cancer or reproductive toxicity.

Material	CAS#	Concentration %	Cancer Agent	Reproductive Toxin	cancer agent &	Reproductive Toxin
Cadmium		trace				
Lead		trace				
Mineral Oil		<2%				

The information contained herein is based on the data available to us and is believed to be correct. However, ND Industries®, Inc. makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their properties prior to use. Since conditions of use are beyond our control, all risks are assumed by the user.