



**ND INDUSTRIES, INC.**  
**1893 BARRETT ROAD**  
**TROY, MICHIGAN 48084**  
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**24 hr. EMERGENCY CHEMTREC:**  
**1-800-424-9300**

**PRODUCT: Expand-A-Seal ES 0105**

**MSDS ID: ND3556**

**ORIG. DATE: 12/14/2004**

**REV. DATE: 3/4/05**

**REV. DATE: 12/19/08 PREPARED BY: Chemical Safety**

**SECTION I -Material Identification and Information H: 2 F: 1 R: 0 PPEB**

COMPONENTS	CAS #	PERCENT %	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Cycloaliphatic amine	MC-10-125	1761-71-3 10-15	n.e.	n.e.	
Synthetic Polymer Resin	MC-10-56	27360-07-2 2-5	15 mg/m3	10 mg/m3	
Epoxy Resin	MC-10-caps	28064-14-4 30-35	n.e.	n.e.	nuisance dust.
Urea-formaldehyde-melamine polymer	MC-10-caps	25036-13-9 10-15	n.e.	n.e.	
Encapsulated blowing agent	MC-10-426	63148-57-2 1-5	n.e.	n.e.	

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.e. **VOC #/US gal. :**

**VAPOR DENSITY:** n.e. air = 1 **DENSITY OF COATING:**

**VAPOR PRESSURE:** n.e.

**MELTING POINT:** n.e.

**SPECIFIC GRAVITY:** > 1.0 water = 1

**EVAPORATION RATE:** n.e. butyl acetate

**WATER REACTIVE:** No

**SOLUBILITY IN WATER:** n.e.

**APPEARANCE AND ODOR:** Green solid with slight odor.

**SECTION III - Fire and Explosion Hazard Data**

**FLASH POINT:** n.e.

**AUTOIGNITION TEMPERATURE:** Unknown.

**FLAMMABILITY LIMITS % IN AIR:** LEL: n.e. UEL: n.e.

**EXTINGUISHER MEDIA:** Use dry chemicals, foam, CO2, and water spray.

**SPECIAL FIREFIGHTING PROCEDURES:** Wear NIOSH approved self-contained breathing apparatus with full face piece operated in pressure-demand or other positive pressure mode when fighting fires. Use water spray to cool fire exposed surfaces and to protect personnel. Either allow fire to burn under controlled conditions or extinguish with foam or dry chemical. Avoid spraying water directly into storage containers due to danger of boil over.

**UNUSUAL FIRE HAZARDS AND CONDITIONS TO AVOID:** Combustion yields oxides of carbon and nitrogen, aldehydes, ammonia, acids and cyanides

# MATERIAL SAFETY DATA SHEET

**PRODUCT:** Expand-A-Seal ES 0105

## SECTION IV - Reactivity Hazard Data

**STABILITY:**        **stable:** X                                **unstable:**  
**HAZARDOUS POLYMERIZATION:**        **may occur:**                                **will not occur:** X

**CONDITIONS TO AVOID:**        None known.

**INCOMPATIBILITY:** None known.

**HAZARDOUS DECOMPOSITION PRODUCTS:**        Combustion yields oxides of carbon and nitrogen, aldehydes, acids and cyanides.

## SECTION V - Health Hazard Data

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

**EYE CONTACT:**        Will cause mechanical irritation.

**FIRST AID:**        Flush eyes with generous amounts of water for 15 minutes lifting both upper and lower eyelids occasionally. Get medical attention.

**SKIN CONTACT:**        Causes skin irritation.

**FIRST AID:**        Remove contaminated clothing/shoes and wipe excess from skin. Flush skin with large amounts of water; use soap if available. Do not apply greases or ointments. If irritation occurs get medical attention.

**INHALATION:**        Inhalation of applied product is not expected to be a route of entry under normal use conditions.

**FIRST AID:**        Remove individual to fresh air. Restore or support breathing as necessary. Get medical attention.

**INGESTION:**        Ingestion is not expected to be a route of entry under normal use conditions.

**FIRST AID:**        If swallowed, DO NOT INDUCE VOMITING. Give person two glasses of milk or water. Never give anything by mouth to an unconscious person. Get medical attention.

**CHRONIC EFFECTS:**        None known.

**Carcinogenic:**        Not listed.

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Component	Oral LD50	Dermal LD50	Inhalation LC50
Toluene	not determined	not established	not established
Cycloaliphatic amine	>625 mg/Kg (rat)	>2110 mg/kg (rabbit)	>10 mg/L/hr. (rat)
Synthetic Polymer Resin	approx. nontoxic	approx. nontoxic	not determined
Epoxy Resin	not determined	not determined	not determined
Urea-formaldehyde-melamine polymer	see notes	see notes	not determined
Encapsulated blowing agent	not determined	not determined	not determined

## SECTION VI - Control and Protective Measures

**RESPIRATORY PROTECTION:** Work in a well ventilated area. Use respiratory protection if conditions warrant.

**PROTECTIVE GLOVES:** Use latex rubber or nitrile gloves.

**EYE PROTECTION:** Wear NIOSH approved safety glasses.

**VENTILATION TO BE USED:** LOCAL EXHAUST:  MECHANICAL: SPECIFIC: OTHER (specify): Work in a well ventilated area.

**PROTECTIVE CLOTHING AND EQUIPMENT:** Wear impervious clothing to prevent repeated prolonged skin exposure.

**HYGIENIC WORK PRACTICES:** Practice good personal hygiene and wash hands after using product.

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

### STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:

Sweep up spilled material and place in appropriate container for disposal.

**WASTE DISPOSAL METHODS:** Dispose of material according to local, state and federal regulations.

**SAFE HANDLING AND STORAGE:** Avoid breathing product vapors and skin contact. Store material in a cool dry place and keep product container sealed when not in use.

### OTHER PRECAUTIONS AND SPECIAL HAZARDOUS INFORMATION:

None known.

**RECOMMENDED NFPA/HMIS RATING**

**HEALTH 2**

**FLAMMABILITY 1**

**REACTIVITY 0**

**PERSONAL PROTECTION B**

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

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## NOTES:

The toxicity data for the urea-formaldehyde-melamine polymer has not been determined, but suppliers of urea-formaldehyde and melamine-formaldehyde resins in an unpolymerized form report their material to be nontoxic to rats orally and rabbits dermally with LD50's of >5000 mg/kg and >2000 mg/kg, respectively.

## 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:

<u>CAS #</u>	<u>CHEMICAL NAME</u>	<u>% BY WEIGHT</u>
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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.

<u>Material</u>	<u>CAS #</u>	<u>Concentration %</u>	<u>Cancer Agent</u>	<u>Reproductive Toxin</u>	<u>cancer agent &amp; Reproductive Toxin</u>
Epichlorohydrin	106-89-8	< 1 ppm	X		

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