



## MATERIAL SAFETY DATA SHEET

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** BUEHLER PHENOLIC RING FORMS  
**IDENTIFICATION NUMBER:** 20-8151-010, 20-8151-100, 20-8152-010, 20-8152-100, 20-8153-010, 20-8153-100,  
 20-8251-010, 20-8251-100, 20-8252-010, 20-8252-100, 20-8253-010, 20-8253-100, 20-8254-010, 20-8254-100  
**PRODUCT USE/CLASS:** Mold

**SUPPLIER:**  
 BUEHLER, a division of Illinois Tool Works Inc.  
 41 WAUKEGAN ROAD  
 LAKE BLUFF, IL 60044

**EMERGENCY:** 800-424-9300  
**INFORMATION:** 847-295-6500  
**PREPARER:** Technical Department, 847-295-6500  
**PREPARE DATE:** 03/23/09, 23 March 2009

### SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%			
01	Phenol/formaldehyde polymer	9003-35-4	30.0-60.0			
02	Hexamethylenetetramine	100-97-0	5.0-10.0			
ITEM	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL – CEILING	COMPANY TLV-TWA	SKIN

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

### SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: No harmful effects known from normal use. May contain trace amounts of residual formaldehyde and/or phenol. May release hazardous fumes of formaldehyde and/or phenol when heated.

ACUTE EFFECTS – EYE CONTACT: Article. Not expected to present a hazard in normal use.

ACUTE EFFECTS - SKIN CONTACT: Article. No harmful effects known.

ACUTE EFFECTS – INHALATION: Article. Not a likely route of exposure. Vapors from heated material may be irritating. Inhalation of dust from grinding or machining of material may cause transient irritation.

ACUTE EFFECTS - INGESTION: Not expected to present a hazard in normal industrial use.

CHRONIC OVEREXPOSURE EFFECTS: \*\*When heated to high temperatures, this product may release formaldehyde and/or phenol vapors. Formaldehyde is irritating to the skin, eyes, nose, and throat, and has been listed as a carcinogen by NTP, IARC, and OSHA. Repeated or prolonged overexposure may cause serious respiratory and/or skin sensitization. Testing in animals has shown reproductive effects. Repeated or prolonged overexposure to phenol via inhalation, ingestion, or skin absorption may cause damage to the liver, kidneys, pancreas, and spleen. Phenol is mutagenic "in-vitro."

OTHER INFORMATION: No information.

PRIMARY ROUTE(S) OF ENTRY: N.A.

### SECTION 4 – FIRST AID MEASURES

EYE CONTACT: No effects known.

SKIN CONTACT: N.A. – No effects known.

INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

INGESTION: Not a likely route of exposure.

NOTES TO PHYSICIAN: No information.

### SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT: N.A.

LOWER EXPLOSIVE LIMIT: N.A.

UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: N.A.

EXTINGUISHING MEDIA: ALCOHOL FOAM, CO<sub>2</sub>, DRY CHEMICAL, FOAM, WATER FOG

UNUSUAL FIRE AND EXPLOSION HAZARDS: Irritating and/or toxic gases or fumes may be released by thermal decomposition or combustion.

SPECIAL FIREFIGHTING PROCEDURES: Use self-contained breathing apparatus and full protective clothing.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: N.A.

## SECTION 7 – HANDLING AND STORAGE

HANDLING: Minimize dust generation and accumulation.

STORAGE: No information.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation usually adequate.

RESPIRATORY PROTECTION: None required under normal conditions of use. If heated, use NIOSH-approved vapor cartridge respirator in accordance with 29 CFR 1910.136 and manufacturer's recommendations

SKIN PROTECTION: Clean clothing to cover skin.

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: No information.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	N.A.	VAPOR DENSITY:	N.A.
ODOR:	None	ODOR THRESHOLD:	N.A.
APPEARANCE:	Colored textured discs or film/tape	EVAPORATION RATE:	N.A.
SOLUBILITY IN H <sub>2</sub> O:	Insoluble		
FREEZE POINT:	N.A.	SPECIFIC GRAVITY:	> 1
VAPOR PRESSURE:	N.A.	pH @ 0.0%:	N.A.
PHYSICAL STATE:	Solid	VISCOSITY:	N.A.
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.A.		

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

## SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID: No information.

INCOMPATIBILITY: No information.

HAZARDOUS DECOMPOSITION PRODUCTS: No information.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

## SECTION 11 – TOXICOLOGICAL PROPERTIES

No product or component toxicological information is available.

## SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL TEST DATA: No information.

## SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Material as sold may be disposed of in landfill if local regulations permit. If material becomes contaminated, follow disposal instructions for contaminant.

## SECTION 14 – TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Not regulated for transport	
DOT TECHNICAL NAME: N.A.	
DOT HAZARD CLASS: N.A.	HAZARD SUBCLASS: N.A.
DOT UN/NA CLASS: N.A.	PACKAGING GROUP: N.A.
	RESP. GUIDE PAGE:
INTERNATIONAL SHIPPING NAME: Not regulated for transport	
INTERNATIONAL ID NUMBER: N.A.	
IMDG CLASS (1°, 2°): N.A.	IMDG PAGE NUMBER: N.A.
IMDG EMS: N.A.	IATA CLASS (1°, 2°): N.A.

## SECTION 15 – REGULATORY INFORMATION

OSHA: Non-hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA – SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED, AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: NONE

SARA SECTION 313: THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 AND 40 CFR PART 372:

----- CHEMICAL NAME ----- CAS NUMBER WT/WT % IS LESS THAN

No SARA Section 313 components exist in this product.

TOXIC SUBSTANCE CONTROL ACT: THE CHEMICAL SUBSTANCES IN THIS PRODUCT ARE ON THE TSCA SECTION 8 INVENTORY. THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES:

----- CHEMICAL NAME ----- CAS NUMBER

No components found.

NEW JERSEY RIGHT-TO-KNOW: THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP 5 COMPONENTS IN THIS PRODUCT: Article - Not applicable

PENNSYLVANIA RIGHT-TO-KNOW: THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%: Article - not applicable

CALIFORNIA PROPOSTION 65: No Proposition 65 chemicals known to exist in this product.

CANADIAN WHMIS: THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS: NONE

COMPONENT RCRA CLASSIFICATIONS: Not regulated

COMPONENT RCRA CODES: No information.

CERCLA RQ VALUE (MINIMUM): None known

## SECTION 16 – OTHER INFORMATION

### HMIS RATINGS

HEALTH: 0

FLAMMABILITY: 1

REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 11/10/03

REASON FOR REVISION: Administrative change for new format.

VOLATILE ORGANIC COMPOUNDS: 0 grams/ltr

### LEGEND:

N.A. – NO INFORMATION

N.E. – NOT ESTABLISHED

N.D. – NOT DETERMINED

ABBREVIATIONS: ACGIH = AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS; OSHA = OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION; TLV-TWA = THRESHOLD LIMIT VALUE – TIME WEIGHTED AVERAGE (8 HOURS); STEL = SHORT-TERM EXPOSURE LIMIT (15 MINUTES); C = CEILING VALUE; PEL = PERMISSIBLE EXPOSURE LIMIT

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