

# Safety Data Sheet



Tecaform AH

ISSUE DATE 5/14/2015

## 1. PRODUCT AND COMPANY IDENTIFICATION

---

PRODUCT NAME: Tecaform AH  
SYNONYMS: Not Applicable  
PRODUCT COLORS: Natural and Black

MANUFACTURER: Ensinger Inc.  
DIVISION: Stock Shapes  
ADDRESS: 365 Meadowlands Blvd., Washington, PA 15301

EMERGENCY PHONE: (724) 746-6050  
OTHER CALLS: (856) 227-0500

CHEMICAL NAME: Polyoxymethylene (POM)  
CHEMICAL FAMILY: Acetal  
CHEMICAL FORMULA: basic formula  $(\text{C}_2\text{H}_4\text{O})_n$

PRODUCT USE: Stock Shape for Machining  
PREPARED BY: Allyson M. Crouse, Technical Resource Manager

SECTION 1 NOTE: Revised May 14, 2015

## 2. HAZARDS IDENTIFICATION

---

EMERGENCY OVERVIEW: Mechanical injury only.

ROUTES OF ENTRY: Eyes

### POTENTIAL HEALTH EFFECTS

EYES: Solid or dust causes irritation or corneal injury due to mechanical action.

SKIN: Essentially nonirritating to skin. Mechanical injury only. Molten material may burn skin.

INGESTION: Single dose oral LD50 has not been determined. Single dose oral toxicity is believed to be very low. No hazards anticipated from ingestion incidental to industrial exposure.

INHALATION: Dust may cause irritation to upper respiratory tract. At room temperature, exposure to vapors are unlikely due to physical properties, normal processing temperatures may generate vapors, which may cause irritation if ventilation is inadequate.

# Safety Data Sheet



Tecaform AH

ISSUE DATE: 5/14/2015

ACUTE HEALTH HAZARDS None Known

CHRONIC HEALTH HAZARDS None Known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE None Known

Carbon Black, CAS 1333-86-4

OSHA: (PEL, 8HR) 3.5 mg/m<sup>3</sup> (FRL\_TWA)

OSHA: (PEL, 8HR) 3.5 mg/m<sup>3</sup> (TL\_PEL)

ACGIH: TWA: 3.5 mg/m<sup>3</sup> (Inhalable Fraction); Notations: Not Classifiable as a Human Carcinogen

Formaldehyde, CAS50-00-0

OSHA: Permissible Exposure Limit 0.75 ppm (TWA)

Permissible Exposure Limit 2 ppm (STEL)

ACGIH: Threshold Limit Value 0.3 ppm (TLV-C)

Particulates

OSHA: Particulates not otherwise regulated/ OSHA (PEL) 15 mg/m<sup>3</sup> (TWA, Total Dust)

Particulates not otherwise regulated/ OSHA (PEL) 5 mg/m<sup>3</sup> (TWA, Respirable Dust)

ACGIH: Particulates not otherwise regulated/ ACGIH (TLV) 10 mg/m<sup>3</sup> (TWA, Total Dust)

NOTES: Formaldehyde, which is a degradation product, is listed as a potential cancer hazard by OSHA, a known human carcinogen by The International Agency for Research on Cancer (IARC, Group 1), and is listed in the 12th Report on Carcinogens (RoC) released by The National Toxicology Program (NTP). Formaldehyde should not pose a risk if exposures are kept below the OSHA Permissible Exposure Limit.

In 1995, the International Agency for Research on Cancer (IARC) concluded that there is "sufficient evidence in experimental animals for the carcinogenicity of carbon black." IARC's overall evaluation was that "Carbon black is possibly carcinogenic to humans (2B)." In 2006, IARC re-affirmed this classification. There has been no causal link between carbon black exposure and cancer risk in humans. Applying the rules of the Globally Harmonized System of Classification and Labeling (GHS, e.g. UN 'Purple Book', EU CLP Regulation) the results of repeated dose toxicity and carcinogenicity studies in animals do not lead to classification of Carbon Black for Specific Target Organ Toxicity (Repeated exposure) and carcinogenicity. UN GHS says that even if adverse effects are seen in animal studies or in-vitro tests, no classification is needed if the mechanism or mode of action is not relevant to humans. The European CLP Regulation also mentions, that no classification is indicated if the mechanism is not relevant to humans. Furthermore, the CLP guidance on classification and labeling states, that "lung overload" animals is listed under mechanism not relevant to humans.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

---

INGREDIENT:

	<u>CASNO.</u>	<u>%WT</u>
Polyacetal Copolymer/Polyoxymethylene (POM)	24969-26-4	>94
Carbon Black	1333-86-4	0 - 2
Other Additives		<4
Formaldehyde	50-00-0	<0.005

This product contains a proprietary blend of components encapsulated within a polymer matrix. These components are not regarded as hazardous under 2012 OSHA Hazard Communication Standard; 29CFR Part 1910.1200.

### 4. FIRST AID MEASURES

---

**EYES** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Mechanical effects only.

**SKIN:** Wash off in flowing water or shower.

**INGESTION:** No adverse effects anticipated by this route of exposure incidental to proper industrial handling. If ingested, induce vomiting; if patient is conscious. Call a poison control center/physician, if patient feels unwell.

**INHALATION:** Remove to fresh air, if effects occur. Consult a physician.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS** No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

### 5. FIRE FIGHTING MEASURES

---

Ignition Temperature: 320°C (608°F)

**EXTINGUISHING MEDIA:** Carbon Dioxide, dry chemical, foam or water spray, dry powder/ solid extinguishing agent

**SPECIAL FIRE FIGHTING PROCEDURES** May produce toxic fume of carbon monoxide, if burning. Do not use a solid water stream as it may scatter and spread fire.

# Safety Data Sheet



Tecaform AH

ISSUE DATE 5/14/2015

UNUSUAL FIRE AND EXPLOSION HAZARDS      None Known

HAZARDOUS DECOMPOSITION PRODUCTS      Carbon Monoxide, Carbon Dioxide, Formaldehyde vapors, and other possible toxic combustion products.

SECTION 5 NOTES      Wear full protective suit. In case of combustion, use a suitable breathing apparatus.

## 6. ACCIDENTAL RELEASE MEASURES

---

ACCIDENTAL RELEASE MEASURES: Ventilate the area and prevent access to unauthorized people. Wear suitable personal protective equipment. Do not allow entry to drains, water courses or soil. Prevent spreading by use of suitable barriers. Take up with suitable equipment, fill up in air-tight containers and give further treatment as soon as possible.

## 7. HANDLING AND STORAGE

---

HANDLING AND STORAGE      Keep away from strong oxidizing compounds and Polyvinyl Chloride. Store in a well-ventilated place. Provide ventilation and wear necessary protectors.

OTHER PRECAUTIONS: Do not smoke in areas where polymer dust is present. Appropriate measures should be taken to control the generation and accumulation of dust during conveying and processing operations. Do not handle hot or molten material without appropriate protective equipment. Maintain good housekeeping in work areas. Do not exceed recommended process temperatures to minimize release of decomposition products. Obtain special instructions, before use. Do not breathe dust. Wash hands thoroughly after handling. Do not eat, drink or smoke; when machining this product. Use personal protective equipment as required.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

---

ENGINEERING CONTROLS: Standard ventilation required

VENTILATION: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

RESPIRATORY PROTECTION: For most conditions a dust mask is sufficient; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator.

EYE PROTECTION: Safety glasses should be sufficient for most operations; however, for dusty operations wear chemical goggles. If vapor exposure causes eye discomfort, use a full-face respirator.

# Safety Data Sheet



Tecaform AH

ISSUE DATE: 5/14/2015

**SKIN PROTECTION:** No precautions other than clean body-covering clothing should be needed. When thermal or melt processing, wear long pants, long sleeves, well insulated gloves, and face shield when there is a chance of contact.

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT:** None Known

**Special Precautions to be taken in Handling and Storage:** Store in sealed containers. Protect from atmospheric moisture. Molten material can produce thermal burns. Avoid skin contact. Fumes released during normal processing may cause irritation. Provide adequate ventilation. Heating the resin above normal processing temperatures may cause hazardous decomposition products. Do not overheat. Handling and fabrication of plastic resins can result in the generation of dust. Dust results from sawing, filing, and sanding of plastic parts in post-molding operations. Quantities of dust in air may be combustible and may cause respiratory irritation.

## EXPOSURE GUIDELINES

Carbon Black, CAS: 1333-86-4

OSHA: (PEL, 8HR) 3.5 mg/m<sup>3</sup> (FRL, TWA)

OSHA: (PEL, 8HR) 3.5 mg/m<sup>3</sup> (TL, PEL)

ACGIH: TWA: 3.5 mg/m<sup>3</sup> (Inhalable Fraction); Notations: Not Classifiable as a Human Carcinogen

Formaldehyde:

OSHA: 0.75 ppm TWA

ACGIH: 0.3 ppm CLV  Ceiling Limit Value

0.75 ppm TWA; 2 ppm STEL  Manufacturer Workplace Exposure Limit

Particulates not otherwise regulated:

OSHA: Particulates not otherwise regulated/ OSHA (PEL) 15 mg/m<sup>3</sup> (TWA, Total Dust)

Particulates not otherwise regulated/ OSHA (PEL) 5 mg/m<sup>3</sup> (TWA, Respirable Dust)

ACGIH: Particulates not otherwise regulated/ ACGIH (TLV) 10 mg/m<sup>3</sup> (TWA, Total Dust)

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

APPEARANCE:	Opaque color stock shape
ODOR:	Not Applicable
PHYSICAL STATE:	Solid
IGNITION TEMPERATURE:	320°C (608°F)
MELTING POINT:	165°C (329°F)
SPECIFIC GRAVITY (H <sub>2</sub> O = 1):	1.38 <input type="checkbox"/> 1.42
EVAPORATION RATE:	Not Applicable
SOLUBILITY IN WATER:	Not soluble to water

## 10. STABILITY AND REACTIVITY

---

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID (STABILITY): High temperatures. Flame. Do not allow mixing of this material with PVC, other halogen containing materials, and partially and/or fully cross linkable thermoplastic elastomers. Avoid prolonged heating at or above the recommended processing temperature.

INCOMPATIBILITY (MATERIAL TO AVOID): Strong acids, oxidizing agents, polyvinyl chloride

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Trioxane, formaldehyde, paraformaldehyde, formic acid.

HAZARDOUS POLYMERIZATION: Not Applicable

## 11. TOXICOLOGICAL INFORMATION

---

TOXICOLOGICAL INFORMATION: No data. In solid state, this material is not considered as being harmful to human health.

## 12. ECOLOGICAL INFORMATION

---

ECOLOGICAL INFORMATION: No data. This material does not harm the environment, but is not biodegradable.

## 13. DISPOSAL CONSIDERATIONS

---

WASTE DISPOSAL METHOD: Dispose of contents/containers in accordance with local, regional, national and international regulations.

## 14. TRANSPORT INFORMATION

---

U.S. DEPARTMENT OF TRANSPORTATION  
Not regulated

## 15. REGULATORY INFORMATION

---

### U.S. FEDERAL REGULATIONS

TSCA (TOXIC SUBSTANCE CONTROL ACT): In compliance with TSCA Inventory requirements for commercial purposes.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT): This product contains no known toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40CFR372.

California Prop. 65 : WARNING! This product contains a chemical known to the State of California to cause cancer. Formaldehyde , Quartz , Unspecified cobalt compounds , Acrylamide , Ethylene oxide.

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Acrylamide , Ethylene oxide  
The State of California, under Proposition 65, regulates Crystalline silica - airborne, unbound particles of respirable size as a carcinogen. In this product, crystalline silica is not supplied in the form regulated in California.

The following impurities, if still present at all, are below the indicated levels:

Acrylamide < 0.20PPM

Ethylene oxide < 0.10PPM

### PA Right to Know

Regulated Chemical(s): Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances):

None known.


### NJ Right to Know

Regulated Chemical(s): Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Carbon Black

## 16. OTHER INFORMATION

---

### ADDITIONAL INFORMATION

MEDICAL USE: CAUTION  Do not use in medical applications involving permanent implantation in the human body.

This Safety Data Sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our

# Safety Data Sheet



Tecaform AH

ISSUE DATE: 5/14/2015

company. We believe this information to be correct but cannot guarantee its accuracy or completeness. Health and safety precaution in this data sheet may not be adequate for all individuals and/or situations. It is the user's responsibility to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in the data sheet shall be construed as a permission or recommendation for the use of any product in a manner that may infringe existing patents. No warranty is made, either expressed or implied.

