Safety Data Sheet

Tecamid® 6/6

ISSUE DATE: 06/03/2015

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Tecamid 6/6
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:	Polyamide
CHEMICAL FAMILY:	Nylon 6/6
CHEMICAL FORMULA:	basic formula $(C_{12}H_{22}N_2O_2)_n$
PRODUCT USE:	Stock Shape for Machining
PREPARED BY:	Allyson M. Crouse, Technical Resource Manager
SECTION 1 NOTE:	Revised June 3, 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. Now 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.

ACUTE HEALTH HAZARDS: None Known

CHRONIC HEALTH HAZARDS: None Known

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: None Known

CARCINOGENICITY – None Known

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“in animals is listed under mechanism not relevant to humans.

Carbon Black CAS# 1333-86-4

OSHA: The legal airborne permissible exposure limit (PEL) is 3.5 mg/m^3 averaged over an 8-hour work shift.

ACGIH: The threshold limit value (TLV) is 3.5 mg/m^3 averaged over an 8-hour work shift.

NIOSH: The recommended airborne exposure limit (REL) is 3.5 mg/m^3 averaged over a 10-hour work shift.

The recommended airborne exposure limit (REL0 is 0.1 mg PAHs/m^3 (as the Cyclohexane-extractable fraction) for Carbon Black in the presence of Polycyclic Aromatic Hydrocarbons averaged over a 10-hour work shift.

Particulates

OSHA: Particulates not otherwise regulated/OSHA (PEL) 15 mg/m^3 (TWA, Total Dust)
Particulates not otherwise regulated/OSHA (PEL) 5 mg/m^3 (TWA, Respirable Dust)

ACGIH: Particulates not otherwise regulated/ACGHI (TLV) 10 mg/m^3 (TWA, Total Dust)

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT:

CAS NO.	% WT
polyhexamethylenediamine adipate, 32131-17-2	>95
Carbon Black, 1333-86-4	0 - 5

The non-hazardous components and exact percentage of the composition have been withheld as a trade secret.

This product consists primarily of high molecular weight polymers, which are not expected to be hazardous.

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

FLASH POINT: Not Applicable

EXTINGUISHING MEDIA: Carbon dioxide, water spray, dry chemical, alcohol resistant foam

SPECIAL FIRE FIGHTING PROCEDURES: Combustible. Large molten masses may ignite spontaneously in air. Water quenching is good practice. Minimize the generation and accumulation of dust.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None Known

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide, Nitrogen oxides, ammonia, aldehyde and hydrogen cyanide

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. Store in a well-ventilated place. Provide ventilation and wear necessary protectors.

OTHER PRECAUTIONS: 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

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: None Known

EXPOSURE GUIDELINES:

Carbon Black CAS# 1333-86-4

OSHA: The legal airborne permissible exposure limit (PEL) is 3.5 mg/m^3 averaged over an 8-hour work shift.
ACGIH: The threshold limit value (TLV) is 3.5 mg/m^3 averaged over an 8-hour work shift.
NIOSH: The recommended airborne exposure limit (REL) is 3.5 mg/m^3 averaged over a 10-hour work shift.
The recommended airborne exposure limit (REL0 is 0.1 mg PAHs/m^3 (as the Cyclohexane-extractable fraction) for Carbon Black in the presence of Polycyclic Aromatic Hydrocarbons averaged over a 10-hour work shift.

Particulates
OSHA: Particulates not otherwise regulated/OSHA (PEL) 15 mg/m^3 (TWA, Total Dust)
Particulates not otherwise regulated/OSHA (PEL) 5 mg/m^3 (TWA, Respirable Dust)
ACGIH: Particulates not otherwise regulated/ACGHI (TLV) 10 mg/m^3 (TWA, Total Dust)

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Semi-finished stock shape
ODOR:	Not Applicable
PHYSICAL STATE:	Solid
MELTING POINT:	>200 °C (>392 °F)
SPECIFIC GRAVITY (H2O = 1):	>1
SOLUBILITY IN WATER:	Insoluble

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS TO AVOID (STABILITY): High temperatures >340°C (>644°F)

INCOMPATIBILITY (MATERIAL TO AVOID): Incompatible with strong acids, strong bases and strong oxidizing agents.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Aldehydes, nitrogen oxides, traces of hydrogen cyanide, ammonia, carbon monoxide, carbon dioxide, cyclopentanone and other possible toxic substances can be generated during thermal decomposition and combustion.

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.

Carcinogenicity
Carbon Black CAS# 1333-86-4:
International Agency for Research on Cancer (IARC) carcinogenic classification: Group 2B (possibly carcinogenic to humans)

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“in animals is listed under mechanism not relevant to humans.

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): All ingredients are either exempt or listed on the TSCA Chemical Substance Inventory

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. Carbon Black

PA Right to Know: The following components are listed: Carbon Black

NJ Right to Know: The following components are listed: Carbon Black

MA Right to Know: The following components are listed: 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 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.