

21600 FOR COATINGS, RESINS, AND RELATED MATERIALS (APPROVED BY THE U.S. DEPARTMENT OF LABOR AS "ESSENTIALLY SIMILAR" TO FORM OSHA-20) (MEETS REQUIREMENTS OF CFR 29 PART 1910.1200, OSHA'S HAZARD COMMUNICATION STANDARD) NPCA 1-84

SECTION 01 - MANUFACTURER AND PRODUCT INFORMATION

MANUFACTURER: TNEPEC COMPANY, INC. 125 WEST 23RD AVENUE NORTH KANSAS CITY, MO. 64116-3064 DATE PRINTED: 11/04/96 CURRENT FORMULA DATE: 04/05/95

EMERGENCY TELEPHONE NO.: 816-474-1425 PREVIOUS FORMULA DATE: 02/09/95 INFORMATION TELEPHONE NO.: 816-474-3400

TRADE NAME: SERIES 066 F65/66/160/161 CONVERTER

MANUFACTURER'S CODE IDENTIFICATION: B066-0066B COLOR: CONVERTER

PRODUCT CLASS: EPOXY

SECTION 02 - HAZARDOUS INGREDIENTS

INGREDIENT: TALC (NO ASBESTOS FIBERS/RESPIRABLE DUST) CAS#: 14807-96-6

PERCENT BY WEIGHT: PROPRIETARY
OCCUPATIONAL EXPOSURE LIMITS:
ACGIH: TLV - TWA 2.000 MG/3H
ACGIH: TLV - STEL .000 NO INFO AVAILABLE
ACGIH: TLV - C .000 NO INFO AVAILABLE
OSHA: PEL - TWA 2.000 MG/3H
OSHA: PEL - STEL .000 NO INFO AVAILABLE
OSHA: PEL - C .000 NO INFO AVAILABLE
VAPOR PRESSURE: .000 NOT APPLICABLE
Not applicable

INGREDIENT: BISPHENOL A TYPE EPOXY RESIN CAS#:

PERCENT BY WEIGHT: PROPRIETARY
OCCUPATIONAL EXPOSURE LIMITS:
ACGIH: TLV - TWA .000 NOT APPLICABLE
ACGIH: TLV - STEL .000 NOT APPLICABLE
ACGIH: TLV - C .000 NOT APPLICABLE
OSHA: PEL - TWA .000 NOT APPLICABLE
OSHA: PEL - STEL .000 NO INFO AVAILABLE
OSHA: PEL - C .000 NOT APPLICABLE
VAPOR PRESSURE: .000 NOT APPLICABLE

The information contained in this section is considered confidential and proprietary and should be used only for safety and health purposes.

INGREDIENT: XYLENE CAS#: 1330-20-7

PERCENT BY VOLUME: 14.610%
OCCUPATIONAL EXPOSURE LIMITS:
ACGIH: TLV - TWA 100.000 PPM
ACGIH: TLV - STEL 150.000 PPM
ACGIH: TLV - C .000 NO INFO AVAILABLE
OSHA: PEL - TWA 100.000 PPM
OSHA: PEL - STEL 150.000 PPM
OSHA: PEL - C .000 NO INFO AVAILABLE
VAPOR PRESSURE: 5.100 MMHG AT 20C

INGREDIENT: METHYL ISOBUTYL KETONE CAS#: 108-10-1

PERCENT BY VOLUME: 25.080%
OCCUPATIONAL EXPOSURE LIMITS:
ACGIH: TLV - TWA 50.000 PPM
ACGIH: TLV - STEL 75.000 PPM
ACGIH: TLV - C .000 NO INFO AVAILABLE
OSHA: PEL - TWA 50.000 PPM
OSHA: PEL - STEL 75.000 PPM
OSHA: PEL - C .000 NO INFO AVAILABLE
VAPOR PRESSURE: 16.000 MMHG AT 20C

INGREDIENT: FORMALDEHYDE CAS#: 50-00-0

PERCENT BY VOLUME: 0.020%
OCCUPATIONAL EXPOSURE LIMITS:
ACGIH: TLV - TWA .000 NOT APPLICABLE
ACGIH: TLV - STEL .000 NOT APPLICABLE
ACGIH: TLV - C .300 PPM

21600
OSHA: PEL - TWA .750 PPM
OSHA: PEL - STEL 2.000 PPM
OSHA: PEL - C .000 NOT APPLICABLE
VAPOR PRESSURE: .000 NO INFO AVAILABLE

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SECTION 03 - HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE:

ACUTE (SHORT TERM):
INHALATION - OVEREXPOSURE TO SOLVENT VAPORS OR SPRAY MIST MAY CAUSE: Nasal and respiratory irritation, anesthetic effects, dizziness, possible unconsciousness and asphyxiation, stupor, weakness, fatigue, nausea, and headache.

INHALATION - OVEREXPOSURE TO FREE PIGMENT DUST MAY CAUSE: Coughing, wheezing, shortness of breath, restricted nasal passages, lung injury.

INHALATION - OTHER:
Not applicable.
SKIN - PROLONGED OR REPEATED CONTACT MAY CAUSE: Allergic skin responses. Can be a skin sensitizer. Moderate irritation, drying of skin, defatting and possible dermatitis.

EYES - CONTACT MAY RESULT IN: Redness, tearing, blurred vision. Severe irritation.

INGESTION MAY RESULT IN: Gastrointestinal irritation, nausea, vomiting, diarrhea, death, aspiration into the lungs which can be fatal.

CHRONIC (LONG TERM, CUMULATIVE):
Prolonged contact or repeated overexposure to some epoxy compounds may result in permanent skin sensitization in susceptible individuals.

NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the vapors may be harmful or fatal. Prolonged or repeated contact with skin may cause primary irritation, dermatitis, or allergic skin reactions. Formaldehyde (and ACGIH as a suspected human carcinogen. It is listed by NTP and IARC as carcinogenic to animals; human evidence is inadequate but formaldehyde may reasonably be expected to be carcinogenic to humans.

TARGET ORGAN EFFECTS:
ANIMAL AND/OR HUMAN STUDIES OF CERTAIN CHEMICALS IN THIS PRODUCT HAVE SHOWN THE FOLLOWING TARGET ORGAN EFFECTS:
Can cause liver damage.
Can cause kidney damage.
Can cause lung damage.
Can cause nervous system effects.
Can cause cancer. Risk of cancer depends on duration and level of exposure.
Can cause skin sensitization.
Can cause eye irritation.
Can cause skin irritation.
Can cause respiratory tract irritation.
Can cause gastrointestinal tract irritation.

TOXICITY INFORMATION:
Consult various toxicology references such as NIOSH's "Registry of Toxic Effects of Chemical Substances" or Sax's "Dangerous Properties of Industrial Chemicals" for specific toxicity information regarding hazardous ingredients.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY OVEREXPOSURE:
Exposure may aggravate persons with eczema, skin sensitization, or other chronic disorders and allergies.

PRIMARY ROUTES OF ENTRY:
Dermal and Inhalation.

EMERGENCY AND FIRST AID PROCEDURES:
INHALATION:
Remove affected individual to fresh air. Treat symptomatically. If breathing is difficult, administer oxygen. If breathing has stopped give artificial respiration. Consult a physician.

SKIN CONTACT:
Wash affected area with soap and water. Remove contaminated clothing. Dispose of or launder accordingly. Consult a physician.

21600
if skin irritation persists.
EYE SPLASH:
Flush immediately with large amounts of clean water under low pressure for at least 15 minutes. Consult a physician.

INGESTION:
Drink 1 or 2 glasses of water to dilute. Do not induce vomiting. Consult a physician or poison control center IMMEDIATELY. Treat symptomatically.

PROPOSITION 65:
This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

OTHER:
This product when mixed with other components acquires the hazards of all components.

SECTION 04 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (F) (SETA FLASH CLOSED CUP): 064

LOWER EXPLOSIVE LIMIT (LEL) : 1.00

FLAMMABILITY CLASSIFICATION:
OSHA:
Flammable liquid - Class IB

DOT:
Flammable liquid

EXTINGUISHING MEDIA:
Foam, carbon dioxide, and dry chemical.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Keep away from heat, open flames, sparks, and areas where static charge may be generated. Do not apply to hot surfaces due to possible fire and explosion risk. For closed containers, pressure build-up and possible explosion might occur due to extreme heat exposure. Solvent vapors are heavier than air and may travel considerable distance to a source of ignition and flash back.

SPECIAL FIRE-FIGHTING PROCEDURES:
Water may be used to cool unstructured containers. Wear self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode to prevent inhalation of hazardous decomposition products. Use appropriate extinguishing media to control fire. Water may cause violent frothing if sprayed directly into containers of burning liquid.

SECTION 05 - REACTIVITY DATA

STABILITY:
Stable.
INCOMPATIBILITY (MATERIALS TO AVOID):
Strong oxidizing agents.
Bases.
Acids.
Amines.

CONDITIONS TO AVOID:
Heat, sparks, open flames.
Amine compounds under uncontrolled conditions.
Isocyanate compounds under uncontrolled conditions.

HAZARDOUS DECOMPOSITION PRODUCTS - FIRE, BURNING OR WELDING OF COATING PRODUCTS MAY FORM:
Carbon monoxide, carbon dioxide, hydrocarbon fragments

HAZARDOUS POLYMERIZATION:
Will not occur.

SECTION 06 - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Remove all sources of ignition. Spills may be collected with inert, absorbent material for proper disposal. Use non-sparking tools, protective gloves, goggles and clothing, adequate ventilation, avoid the breathing use respiratory protective devices. Transfer absorbent material to suitable containers for proper disposal.

WASTE DISPOSAL METHOD:
Dispose of in accordance with Federal, state, and local regulations regarding pollution.

SECTION 07 - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION:
Respiratory protective devices must be used when engineering and administrative controls are not adequate to maintain Threshold Limit Values (TLV) and Permissible Exposure Limits (PEL) of airborne contaminants below the listed values for those hazardous ingredients identified in Section 17 of this MSDS. Observe OSHA regulations for respirator use (CFR 29, 1910.134) whenever a respirator is used.

Sufficient chemical cartridge, air purifying half-mask respirators can be used within certain limitations; consult the respirator manufacturer for specific uses and limitations. Where airborne contaminant concentrations are unknown, the use of a NIOSH/MSHA approved fresh air supplied respirator is mandatory.

VENTILATION:
Adequate ventilation, in volume and pattern, should be provided through both local and general exhaust to keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limit (PEL) and ACGIH's Threshold Limit Values (TLV). Appropriate ventilation should be employed to remove hazardous decomposition products formed during welding or flame cutting operations of surfaces coated with this product.

Heavier than air solvent vapors should be removed from lower levels of work area due to potential explosion hazard and all ignition sources (non-explosion proof equipment) should be eliminated if flammable mixtures will be encountered.

PROTECTIVE GLOVES:
Chemical resistant.

EYE PROTECTION:
Use chemical resistant splash type goggles.

OTHER PROTECTIVE EQUIPMENT:
Use protective cream where skin contact is likely. Use chemical resistant coveralls or apron to protect against skin and clothing contamination.

HYGIENIC PRACTICES:
Wash hands and other contaminated skin areas with warm soap and water before.

SECTION 08 - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
Store in dry, closed, secure tight and upright to prevent leakage. Do not store in high temperature areas or near fire or open flame. Refer to product data sheet for recommended storage temperatures.

OTHER PRECAUTIONS:
Do not use near heat, sparks, or open flame. Use approved grounding procedures. Prevent prolonged breathing of vapor or spray mist. Prevent contact with skin and eyes. Do not take internally. Keep out of reach of children. Do not reuse or alter containers without proper industrial cleaning. Do not weld or flame cut empty, uncleaned containers due to potential fire and explosion hazard. Consult product data sheet for proper application instructions.

SECTION 09 - PHYSICAL DATA

BOLLING RANGE (F AT 760 MMHG): 237 - 298

VAPOR DENSITY: HEAVIER THAN AIR

WEIGHT PER GALLON: 10.73

X VOLATILE BY VOLUME: 42.400

X SOLIDS BY WEIGHT: 13.577

EVAPORATION RATE: SLOWER - ETHYL ETHER

VOC (LBS/GAL): 2.940

SECTION 10 - OTHER INFORMATION

For specific information regarding occupational safety and health standards, please refer to the Code of Federal Regulations, Title 29, Part 1910.

To the best of our knowledge, the information contained herein is accurate. However, neither the Tnemec Company or any of its

21600

subsidiaries assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

SECTION 11 - RIGHT-TO-KNOW INFORMATION

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF THE EMERGENCY PLANNING & COMMUNITY RIGHT-TO-KNOW ACT OF 1986 AND OF 40 CFR 372:

CAS NO.	CHEMICAL NAME	% BY WGT
1330-20-7	XYLENE	11.090
108-10-1	METHYL ISOBUTYL KETONE	15.580

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