

Wearcoat 481HP Part B

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Wearcoat 481HP Part B
Common Name: Cycloaliphatic Amine Epoxy Curing Agent
SDS Number: I104
Revision Date: 3/6/2016
Version: 1
Chemical Family: Cycloaliphatic Amine
Supplier Details: Coatings For Industry, Inc.
 319 Township Line Road
 Souderton, PA 18964

Emergency: Infotrac
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2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Acute toxicity, 4 Oral
 Health, Skin corrosion/irritation, 1 B
 Health, Serious Eye Damage/Eye Irritation, 1
 Health, Skin sensitization, 1

GHS Label elements, including precautionary statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage
 H318 - Causes serious eye damage
 H317 - May cause an allergic skin reaction

GHS Precautionary Statements:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
 P264 - Wash hands thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P273 - Avoid release to the environment.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
 P310 - Immediately call a POISON CENTER or doctor/physician.
 P333+313 - If skin irritation or a rash occurs: Get medical advice/attention.
 P362 - Take off contaminated clothing and wash before reuse.

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P501 - Dispose of contents/container in accordance with local, regional, state, federal, and international regulations.

Hazards not otherwise classified (HNOC) or not covered by GHS

Route of Entry:	Inhalation, skin and eye contact.
Target Organs:	Prolonged or repeated exposure may cause injury or illness of the respiratory system (lungs).
Inhalation:	Inhalation of vapor or aerosol may cause severe irritation to the respiratory tract (nose, throat, and lungs). Inhalation of vapors or aerosol may cause central nervous system depression with symptoms that include headache, nausea, impaired judgment, confusion, blurred vision, fatigue, loss of coordination, or dizziness.
Skin Contact:	Contact may cause skin burning. Contact may cause skin sensitization, an allergic reaction which becomes evident on re-exposure to this material. Skin absorption of harmful amounts possible from excessive exposure only.
Eye Contact:	Corrosive. Direct contact with eyes will cause severe burns and may cause permanent damage, including blindness. High vapor concentrations may be irritating.

3	COMPOSITION/INFORMATION ON INGREDIENTS
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Ingredients:

Cas#	%	Chemical Name
100-51-6	<40%	Benzyl alcohol
2855-13-2	<35%	Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-
25620-58-0	<10%	Trimethylhexamethylenediamines
0	>15%	cycloaliphatic amine

4	FIRST AID MEASURES
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Inhalation:	If affected, remove to fresh air. Keep warm and quiet. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. GET IMMEDIATE MEDICAL ATTENTION.
Skin Contact:	Remove contaminated clothing and footwear immediately, and wash before reuse. Discard clothing and footwear which cannot be decontaminated. Wash with soap and water. Get medical attention if irritation develops and persists.
Eye Contact:	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Get immediate medical attention.
Ingestion:	DO NOT INDUCE VOMITING. CORROSIVE HAZARD. This material may cause further damage if vomiting is induced. Immediately give the victim one or two glasses of water or milk to drink. Never give anything by mouth to an unconscious person. GET IMMEDIATE MEDICAL ATTENTION.

Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat. Neurological disorders Asthma. Skin disorders and Allergies. Eye disease.

NOTE TO PHYSICIANS: Application of corticosteroid cream has been effective in treating skin irritation.

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5	FIRE FIGHTING MEASURES
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Flash Point: Greater than 200F

Flash Point Method: TCC

May generate ammonia gas. May generate toxic nitrogen oxide gases. Use of water may result in the formation of very toxic aqueous solutions. Do not allow run-off from fire fighting to enter drains or water courses. Incomplete combustion may form carbon monoxide. Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

Extinguishing Media:

Water Fog, Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical, Dry sand, Limestone powder.

Fire Fighting Instructions:

Full emergency equipment with self-contained breathing apparatus and full protective clothing should be worn by fire fighters. During a fire irritating, highly toxic gases may be generated by thermal decomposition or combustion. (See Section VIII) Emits toxic fumes under fire conditions. Isolate from heat, electrical equipment, sparks, and open flame. Closed container may explode when exposed to extreme heat. Wear neoprene gloves when handling refuse from fire.

6	ACCIDENTAL RELEASE MEASURES
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Containment Techniques

Contain spill.

Clean-Up Techniques

Wear proper personal protective clothing and equipment.

Do not flush liquid into public sewer, water systems or surface waters.

Soak up large spill residue and small spills with an inert absorbent. Place into labeled, closed container; store in safe location to await disposal. Wash the spill area with soap and water. Dispose of in accordance with national and local regulations.

Change contaminated clothing and launder before reuse.

CAUTION: Spilled liquid and dried film may be slippery. Use care to avoid falls.

7	HANDLING AND STORAGE
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Handling Precautions:

Avoid eye contact.

Avoid repeated or prolonged skin contact.

Avoid inhalation of aerosol, mist, spray, fume or vapor.

Avoid drinking, tasting, swallowing or ingesting this product.

Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities.

Provide eyewash fountains and safety showers in the work area.

Use under well ventilated conditions.

Storage Requirements:

Do not store in open, unlabeled or mislabeled containers.

Store in cool, well ventilated area.

Do not allow product to freeze.

Do not puncture or stack drums.

Keep container closed when not in use.

Do not reuse empty container without commercial cleaning or reconditioning.

8	EXPOSURE CONTROLS/PERSONAL PROTECTION
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Engineering Controls:

Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240 1634, USA.

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Personal Protective Equipment:

Provide readily accessible eye wash stations and safety showers,
 Hand protection: Butyl-rubber, Nitrile rubber, or Neoprene gloves. PVC disposable gloves, Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection: Chemical resistant goggles must be worn.

Skin and body protection: Long sleeve shirts and trousers without cuffs.

Special instructions for protection and hygiene: Discard contaminated leather articles, Wash hands at the end of each workshift and before eating, smoking or using the toilet. Provide readily accessible eye wash stations and safety showers.

Respiratory Protection:

Wear a respirator approved by NIOSH/MSHA (e.g., an organic vapor respirator, a full face air purifying respirator for organic vapors, or a self contained breathing apparatus) whenever exposure to aerosol, mist, spray, fume or vapor exceed the exposure limit(s) of any chemical substance listed in this MSDS. Use respirator in accordance with manufacturer's use limitations and OSHA standard 1910.134 (29CFR).

Components with workplace control parameters:

Benzyl alcohol (100-51-6)

TWA 10 ppm USA. Workplace Environmental Exposure Levels (WEEL)

9	PHYSICAL AND CHEMICAL PROPERTIES
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Appearance:	Clear / slight yellow tint	Odor:	Mild amine
Physical State:	Liquid	Solubility:	Negligible in water.
Spec Grav./Density:	0.95-1.05	Percent Volatile:	0
Boiling Point:	401 F	VOC:	0
pH:	Alkaline		

10	STABILITY AND REACTIVITY
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Chemical Stability: This product is stable.

Conditions to Avoid: Contamination by those materials referred to under incompatibility.

Materials to Avoid: Sodium hypochlorite.
 CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations.
 Nitrous acid and other nitrosating agents.
 Reactive metals (e.g. sodium, calcium, zinc etc.).
 Materials reactive with hydroxyl compounds.
 Organic acids (i.e. acetic acid, citric acid etc.).
 Mineral acids.
 Product slowly corrodes copper, aluminum, zinc and galvanized surfaces.
 Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
 Oxidizing agents.

Hazardous Decomposition: Aldehydes, Flammable hydrocarbon fragments.
 Nitrosamine, Nitrogen oxides (NOx). Nitrogen oxide can react with water vapors to form corrosive nitric acid.
 Ammonia, Nitric acid.
 Carbon monoxide, Carbon dioxide (CO2).

Hazardous Polymerization: Hazardous polymerization will not occur.

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TOXICOLOGICAL INFORMATION

Likely routes of exposure

Effects on Eye: Severe eye irritation.

Effects on Skin: If absorbed through the skin, may cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.

Inhalation Effects: May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure. May cause nose, throat, and lung irritation. Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system.

Ingestion Effects: Harmful if swallowed. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion, breathing difficulties. Severe cases of overexposure can result in respiratory failure.

Symptoms: Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat, Neurological disorders, Asthma., Skin disorders and Allergies., Eye disease.

Benzyl alcohol (100-51-6)

Information on toxicological effects

Acute toxicity:

LD50 Oral - rat - 1,230 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Excitement. Behavioral:Coma.

Inhalation: no data available

LD50 Dermal - rabbit - 2,000 mg/kg

Skin corrosion/irritation: Skin - rabbit Result: Irritating to skin. - 24 h

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

Additional Information:

RTECS: DN3150000

Central nervous system depression

Liver - Irregularities - Based on Human Evidence

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (2855-13-2)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 1,030 mg/kg

Inhalation LC50 no data available

Dermal LD50 Other information on acute toxicity

Skin corrosion/irritation: Skin - rabbit - Skin irritation

Serious eye damage/eye irritation: Eyes - rabbit - Corrosive to eyes

Respiratory or skin sensitisation: May cause allergic skin reaction.

Causes sensitisation.

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard

Potential health effects: Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. Causes skin burns. Eyes Causes eye burns.

Synergistic effects: no data available

Additional Informatio RTECS: GV5020833

Trimethylhexamethylenediamines (25620-58-0)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 910 mg/kg

Inhalation LC50: no data available

Dermal LD50: no data available

Other information on acute toxicity

Skin corrosion/irritation: Causes skin burns.

Serious eye damage/eye irritation: Risk of serious damage to eyes.

Respiratory or skin sensitization: May cause allergic skin reaction.

Germ cell mutagenicity: no data available

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Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System): no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion Harmful if swallowed. Skin Harmful if absorbed through skin. Causes skin burns. Eyes Causes eye burns.

Signs and Symptoms of Exposure: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea

Synergistic effects: no data available

Additional Information:

RTECS: Not available

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ECOLOGICAL INFORMATION**Benzyl alcohol (100-51-6)**

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Lepomis macrochirus* (Bluegill) - 10 mg/l - 96 h.

Toxicity to daphnia and EC50 - *Daphnia magna* (Water flea) - 55 mg/l - 24 h.

other aquatic invertebrates

Persistence and degradability: Biodegradability Biotic/Aerobic - Exposure time 28 d Result: 92 - 96 % - Readily biodegradable.

Bioaccumulative potential: no data available

Mobility in soil: no data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

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Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (2855-13-2)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Leuciscus idus* (Golden orfe) - 110 mg/l - 96.0 h.

Toxicity to daphnia EC50 - *Daphnia magna* (Water flea) - 17.4 mg/l - 48 h.
and other aquatic invertebrates

Toxicity to algae EC50 - *Desmodesmus subspicatus* (green algae) - 37 mg/l - 72 h.

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

Trimethylhexamethylenediamines (25620-58-0)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Leuciscus idus* (Golden orfe) - 172.0 mg/l - 48.0 h.

Toxicity to daphnia and other aquatic invertebrates EC50 - *Daphnia magna* (Water flea) - 31.5 mg/l - 24 h.

Toxicity to algae EC50 - *Desmodesmus subspicatus* (green algae) - 29.5 mg/l - 72 h.

Persistence and degradability: Biodegradability Result: 7 % - According to the results of tests of biodegradability this product is not readily biodegradable.

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

13**DISPOSAL CONSIDERATIONS**

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines.

Liquids can not be disposed of in a landfill.

Contaminated packaging: Dispose of as unused product.

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14	TRANSPORT INFORMATION
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UN3066, Paint or Paint related material, 8, PGIII

15	REGULATORY INFORMATION
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Component (CAS#) [%] - CODES

Benzyl alcohol (100-51-6) [<40%] HAP, MASS, PA, TSCA

Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl- (2855-13-2) [<35%] TSCA

Trimethylhexamethylenediamines (25620-58-0) [<10%] TSCA

Cycloaliphatic amine (0) [>15%] TSCA

Regulatory CODE Descriptions

HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act

16	OTHER INFORMATION
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NOTICE: This information is presented in good faith and believed to be accurate as of the effective date below. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Coatings For Industry, Inc. assumes no responsibility for personal injury or property damage to vendees, users, or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material. Regulatory requirements are subject to change and may differ from one location to another: it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The preceding specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations.