

Wearcoat 474 / Wearcoat 474-R Part B

1	PRODUCT AND COMPANY IDENTIFICATION
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Product Identifier: Wearcoat 474 / Wearcoat 474-R Part B
Common Name: Aliphatic Amine Epoxy Curing Agent
SDS Number: I176
Revision Date: 8/6/2021
Version: 2

Supplier Details: Coatings For Industry, Inc.
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 Souderton, PA 18964

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2	HAZARDS IDENTIFICATION
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Classification of Substance

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

Health, Skin corrosion/irritation, 1
 Health, Respiratory or skin sensitization, 1 Skin
 Health, Serious Eye Damage/Eye Irritation, 1
 Health, Acute toxicity, 4 Inhalation
 Health, Reproductive toxicity, 2
 Environmental, Hazards to the aquatic environment - Acute, 2
 Environmental, Hazards to the aquatic environment - Acute, 3
 Health, Acute toxicity, 4 Oral
 Health, Germ cell mutagenicity, 2
 Health, Specific target organ toxicity - Repeated exposure, 2
 Physical, Flammable Liquids, 3

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



GHS Hazard Statements:

H314 - Causes severe skin burns and eye damage
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H332 - Harmful if inhaled
 H361 - Suspected of damaging fertility or the unborn child
 H401 - Toxic to aquatic life
 H402 - Harmful to aquatic life
 H302 - Harmful if swallowed
 H341 - Suspected of causing genetic defects (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
 H373 - May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
 H226 - Flammable liquid and vapor

GHS Precautionary Statements:

- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 - Keep container tightly closed.
- 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.
- P271 - Use only outdoors or in a well-ventilated area.
- P272 - Contaminated work clothing should not be allowed out of the workplace.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER/doctor/...
- P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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/doctor/...
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.
- P362 - Take off contaminated clothing and wash before reuse.
- P403 + P235 - Store in a well-ventilated place. Keep cool.
- P404 - Store in a closed container.
- P405 - Store locked up.
- P501 - Dispose of contents/container in accordance with existing federal, state, and local environmental control laws.

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.
- Ingestion:** Ingestion (swallowing) of this material may burn the mouth, throat, and stomach.

3	COMPOSITION/INFORMATION ON INGREDIENTS
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CAS#	Chemical Ingredients: % Chemical Name:
84852-15-3	7-26% Phenol, 4-nonyl-, branched
108-95-2	0.5-3% Phenol
*****	<2% Aliphatic Amine (Proprietary)
140-31-8	3-19% n-Aminoethylpiperazine
111-41-1	<0.3% Ethanol, 2-[(2-aminoethyl)amino]-
*****	20-40% Alicyclic Aliphatic Polyamine (Proprietary)
*****	4-15% Alkylphenol (Proprietary)
*****	4-15% Alkyletheramine (Proprietary)
64742-95-6	5-10% Solvent naphtha, petroleum, light arom.
98-82-8	0.1-0.5% Cumene
95-63-6	2-5% 1,2,4-Trimethylbenzene
68683-29-4	10-20% 2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits.

- 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:** Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse. Discard clothing and footwear which cannot be decontaminated.
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Then remove contact lenses, if easily removeable, and continue irrigation for not less than 15 minutes.
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.
- If irritation or other symptoms (as noted above) occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

- Flash Point:** Greater than 115F
Flash Point Method: TCC
Lower Explosive Limit: 0.9 (Solvent Naphtha)
Upper Explosive Limit: 6.2 (Solvent Naphtha)
- Ammonia gas may be liberated at high temperatures. In case of incomplete combustion an increased formation of oxides of nitrogen (NOx) is to be expected. Incomplete combustion may form carbon monoxide. May generate ammonia gas. May generate toxic nitrogen oxide gasses. Burning produces noxious and toxic fumes. Downwind personnel must be evacuated.
- Extinguishing Media:**
Water Fog, foam, dry chemical, CO2.

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.

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.

- 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.

Personal Protective Equipment:

Eye/Face Protection:

Wear eye protection (chemical goggles or goggles and an 8-inch (minimum) full face shield where spilling and splashing may occur).

Skin Protection:

Wear chemical resistant (impervious) gloves. If splashing is likely, wear impervious clothing and boots to prevent skin contact.

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).

Phenol cas#:(108-95-2)

TWA 5 ppm USA. ACGIH Threshold Limit Values (TLV)
Central Nervous System impairment Upper Respiratory Tract irritation Lung damage Substances for which there is a Biological Exposure Index or Indices (see BEI section) Not classifiable as a human carcinogen Danger of cutaneous absorption

TWA 5 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -
19 mg/m3 1910.1000
Skin notation

TWA 5 ppm USA. Occupational Exposure Limits (OSHA) - Table Z- 1
19 mg/m3 Limits for Air Contaminants
Skin designation The value in mg/m3 is approximate.

TWA 5 ppm USA. NIOSH Recommended Exposure Limits
19 mg/m3
Potential for dermal absorption 15 minute ceiling value

C 15.6 ppm USA. NIOSH Recommended Exposure Limits
60 mg/m3
Potential for dermal absorption 15 minute ceiling value

Cumene (98-82-8)

TWA 50 ppm USA. ACGIH Threshold Limit Values (TLV)
Central Nervous System impairment Eye, skin, & Upper Respiratory Tract irritation

TWA 50 ppm USA. NIOSH Recommended Exposure Limits
245 mg/m³
Potential for dermal absorption

TWA 50 ppm USA. Occupational Exposure Limits (OSHA) - Table Z- 1 Limits for Air Contaminants
245 mg/m³
Skin designation The value in mg/m³ is approximate.

TWA 50 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -1910.1000
245 mg/m³
Skin notation

1,2,4-Trimethylbenzene (95-63-6)

Components with workplace control parameters
TWA 25 ppm USA. OSHA - TABLE Z-1 Limits for Air Contaminants -1910.1000
125 mg/m³

TWA 25 ppm USA. ACGIH Threshold Limit Values (TLV)
123 mg/m³

TWA 25 ppm USA. NIOSH Recommended Exposure Limits
125 mg/m³

hemimellitene is a mixture of the 1,2,3-isomer with up to 10% of related aromatics such as the 1,2,4-isomer.

Aliphatic Amine (Proprietary)

ACGIH Ceiling Limit Value: 0.1mg/m³
OSHA Z1A Ceiling Limit Value: 0.1mg/m³
US CA OEL Ceiling Limit Value: 0.1mg/m³
TN OEL Ceiling Limit Value: 0.1mg/m³
NIOSH Ceiling Limit Value: 0.1mg/m³

9	PHYSICAL AND CHEMICAL PROPERTIES		
Appearance:	Clear / amber	Odor:	Mild amine
Physical State:	Liquid	Solubility:	Negligible in water.
Specific Gravity or Density:	0.95-1.05	Percent Volatile:	9.1% by Volume
		Volatile organic compound:	60 g/l mixed material

10	STABILITY AND REACTIVITY	
Chemical Stability:	Product is stable under normal conditions.	
Conditions to Avoid:	Contamination by those materials referred to under incompatibility.	
Materials to Avoid:	Reactive metals (e.g. sodium, calcium, zinc, etc.). Materials reactive with hydroxyl compounds. Mineral acids. Sodium hypochlorite. 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: Nitric Acid.
Ammonia.
Nitrogen oxides (NOx).
Nitrogen oxide can react with water vapors to create nitric acid.
Carbon monoxide.
Carbon dioxide (CO2).
Aldehydes.
Flammable hydrocarbon fragments.

Hazardous Polymerization: Hazardous polymerization will not occur.

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TOXICOLOGICAL INFORMATION

Phenol CAS#: (108-95-2)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 317.0 mg/kg Remarks: Behavioral:Convulsions or effect on seizure threshold.

LD50 Oral - rat - 410.0 - 650.0 mg/kg

Inhalation LC50 LC50 Inhalation - rat - 8 h - 900 mg/m³

Dermal LD50 LD50 Dermal - rabbit - 630.0 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Skin - rabbit - Severe skin irritation - 24 h

Serious eye damage/eye irritation: Eyes - rabbit - Severe eye irritation

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: In vitro tests showed mutagenic effects

Carcinogenicity:

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Phenol)

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): May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: no data available

Potential health effects: Inhalation Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion Toxic if swallowed. Skin Toxic 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, Vomiting, Circulatory collapse, tachypnea, paralysis, Convulsions, Coma., necrosis of mouth and G.I. Tract, Jaundice, respiratory failure, cardiac arrest

Synergistic effects: no data available

Additional Information:

RTECS: SJ3325000

n-Aminoethylpiperazine CAS#: (140-31-8)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 2,107.5 mg/kg

Inhalation LC50 no data available

Dermal LD50 LD50 Dermal - rabbit - 866.8 mg/kg

Other information on acute toxicity

Skin corrosion/irritation: Skin - rabbit - Severe skin irritation

Serious eye damage/eye irritation: Eyes - rabbit - Moderate eye irritation

Respiratory or skin sensitization: May cause allergic skin reaction.

Germ cell mutagenicity: Genotoxicity in vitro - Hamster - ovary Mutation in mammalian somatic cells.

Sister chromatid exchange

Genotoxicity in vitro - mouse - lymphocyte Morphological transformation.

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: Reproductive toxicity - rat - Oral:

Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count).
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 May be harmful if swallowed. Skin Toxic if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

Synergistic effects: no data available

Additional Information:

RTECS: TK8050000

1,2,4-Trimethylbenzene CAS#: (95-63-6)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - 5,000 mg/kg

Inhalation LC50 LC50 Inhalation - rat - 4 h - 18,000 mg/m3

Dermal LD50 no data available

Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: Genotoxicity in vitro - in vitro assay - *S. typhimurium* - with and without metabolic activation - negative
Genotoxicity in vivo - rat - male and female - Intraperitoneal - negative

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): May cause respiratory irritation.

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. May cause respiratory tract irritation. Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation.

Signs and Symptoms of Exposure: prolonged or repeated exposure can cause:, narcosis, Bronchitis., Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional Information:

RTECS: DC3325000

Cumene CAS#: (98-82-8)

Information on toxicological effects

Acute toxicity:

Oral LD50 LD50 Oral - rat - male - 2,260 mg/kg

Inhalation LC50 no data available

Dermal LD50

Other information on acute toxicity NOAEL Feed - rat - male - > 535.8 mg/kg

Skin corrosion/irritation: Skin - rabbit - No skin irritation - OECD Test Guideline 404

Serious eye damage/eye irritation: Eyes - rabbit - No eye irritation - OECD Test Guideline 405

Respiratory or skin sensitisation: guinea pig - Did not cause sensitisation on laboratory animals. - OECD Test Guideline 406

Germ cell mutagenicity: Genotoxicity in vitro - in vitro assay - *S. typhimurium* - with and without metabolic activation - negative
Genotoxicity in vivo - mouse - male and female - inhalation (gas) - negative

Carcinogenicity:

IARC: 2B - Group 2B: Possibly carcinogenic to humans (Cumene)

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): May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System): no data available
Aspiration hazard: May be fatal if swallowed and enters airways.

Potential health effects: Inhalation May be harmful if inhaled. Causes respiratory tract irritation. Ingestion May be harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage. Skin May be harmful if absorbed through skin. Causes skin irritation. Eyes Causes eye irritation.
Signs and Symptoms of Exposure: narcosis, Central nervous system depression, Dermatitis, Gastrointestinal disturbance, Damage to the lungs., Liver injury may occur., Kidney injury may occur.
Synergistic effects: no data available

Additional Information:
RTECS: GR8575000

SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC CAS#: (64742-95-6)

ACUTE TOXICITY

Route of Exposure Conclusion / Remarks

Inhalation

Toxicity: Minimally Toxic. Based on test data for the material. Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs. Based on test data for structurally similar materials.

Ingestion

Toxicity: LD50 > 3000 mg/kg Minimally Toxic. Based on test data for structurally similar materials.

Skin

Toxicity: LD50 > 3160 mg/kg Minimally Toxic. Based on test data for the material.

Irritation: Mildly irritating to skin with prolonged exposure. Based on test data for the material.

Eye

Irritation: May cause mild, short-lasting discomfort to eyes. Based on test data for the material.

CHRONIC/OTHER EFFECTS

Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema

Phenol, 4-nonyl-, branched CAS#: (84852-15-3)

Acute Toxicity:

Acute oral toxicity: LD50 (Rat): 1,246 mg/kg

Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity: Remarks: No data available

Acute dermal toxicity: Remarks: No data available

Skin corrosion/irritation

Remarks: Extremely corrosive and destructive to tissue.

Species: Rabbit, Result: Causes burns.

Serious eye damage/eye irritation

Species: Rabbit, Result: Risk of serious damage to eyes.

Respiratory or skin sensitisation

Remarks: No data available

Germ cell mutagenicity

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.

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.

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.

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.

Reproductive toxicity

Teratogenicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

Aspiration toxicity

No aspiration toxicity classification

Further information

Remarks: No data available

Aliphatic Amine (Proprietary)

Information on toxicological effects

Acute toxicity:

Oral LD50 - rat - 980 mg/kg

Inhalation LC50 - rat - 4 h - 1.34 mg/m³

Dermal LD50 - rabbit - 2000 mg/kg

Other information on acute toxicity no data available

Skin corrosion/irritation: Causes skin burns

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

Respiratory or skin sensitization: Dermal sensitization to this product has been seen in some humans

Germ cell mutagenicity: Suspected of causing genetic defects.

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: Suspected of damaging fertility or the unborn child

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

Specific target organ toxicity - repeated exposure (Globally Harmonized System): May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard: no data available

Synergistic effects: no data available

Alkylphenol (Proprietary)

Information on toxicological effects

Acute toxicity:

Oral LD50 - rat - >2000 mg/kg

Inhalation LC50 - rat - 4 h - >5 mg/l

Dermal LD50 -rabbit -1550mg/kg

Other information on acute toxicity

Skin corrosion/irritation: mild irritant

Serious eye damage/eye irritation: severe irritant

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

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

Synergistic effects: no data available

Alkyletheramine (Proprietary)

Information on toxicological effects

Acute toxicity:

Oral LD50 - rat - 1,100 mg/kg

Inhalation LC50 - rat - 4 h - no data available

Dermal LD50 - rabbit - 1550mg/kg

Other information on acute toxicity

Skin corrosion/irritation: mild irritant

Serious eye damage/eye irritation: severe irritant

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

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

Synergistic effects: no data available

2-Propanetrinitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated CAS#:(68683-29-4)

Information on toxicological effects

Acute toxicity:

Oral LD50 - rat - .15.4g/kg

Inhalation LC50 - rat - 4 h - no data available

Dermal LD50 - rabbit - >3g/kg

Other information on acute toxicity

Skin corrosion/irritation: moderate irritant

Serious eye damage/eye irritation: slight irritant

Respiratory or skin sensitisation: strong sensitizer

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: Suspected of damaging fertility or the unborn child (Category 2)

Specific target organ toxicity - single exposure (Globally Harmonized System): May cause respiratory irritation.

Specific target organ toxicity - repeated exposure (Globally Harmonized System): Causes damage to organs through prolonged or repeated exposure (Category 1)

Aspiration hazard: no data available

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ECOLOGICAL INFORMATION

Phenol CAS#: (108-95-2)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - *Leuciscus idus* (Golden orfe) - 14.00 - 25.00 mg/l - 48 h.

LC50 - *Carassius auratus* (goldfish) - 36.10 - 68.80 mg/l - 96 h

EC100 - *Daphnia magna* (Water flea) - 100.00 mg/l - 24 h

Toxicity to algae EC50 - *Chlorella vulgaris* (Fresh water algae) - 370.00 mg/l - 96 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.

n-Aminoethylpiperazine CAS#: (140-31-8)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 100.0 mg/l - 96.0 h.

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 32 mg/l - 48 h.

Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 495 mg/l - 72 h.

Persistence and degradability: Biodegradability Biotic/Aerobic Result: < 1 % - 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.

1,2,4-Trimethylbenzene CAS#: (95-63-6)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 7.72 mg/l - 96.0 h.

Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 3.6 mg/l - 48 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.

Toxic to aquatic life.

Cumene CAS#: (98-82-8)

Information on ecological effects

Toxicity:

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 4.8 mg/l - 96 h.

Toxicity to daphnia EC50 - Daphnia - 2.14 mg/l - 48 h.

and other aquatic Method: OECD Test Guideline 202 invertebrates

Toxicity to algae EC50 - Pseudokirchneriella subcapitata (green algae) - 2.60 mg/l - 72 h.

Persistence and degradability: Biodegradability Result: - 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.

Toxic to aquatic life with long lasting effects.

SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC CAS#: (64742-95-6)

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

MOBILITY

Material -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradation:

Material -- Expected to be readily biodegradable.

Hydrolysis:

Material -- Transformation due to hydrolysis not expected to be significant.

Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation:

Material -- Expected to degrade rapidly in air

Phenol, 4-nonyl-, branched CAS#: (84852-15-3)

Toxicity to fish: LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.209 mg/l, Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 0.0844 mg/l, Exposure time: 48 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.

Toxic to aquatic life with long lasting effects.

Aliphatic Amine (Proprietary)

Toxicity to algae: (Scenedesmus subspicatus) EC50 (72h): 12mg/l

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.

Alkylphenol (Proprietary)

Toxicity to fish: LC50 (Fish - Fathead minnow): 5,140 micrograms/l, Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 3,900 micrograms/l, Exposure time: 48 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.

Alkyletheramine (Proprietary)

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Persistence and degradability: no data available

Bioaccumulative potential: low

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.

2-Propanetrinitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated CAS#:(68683-29-4)

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): >1000 mg/l, Exposure time: 48 h

Toxicity to algae: EC50 (72h): >1000mg/l

Persistence and degradability: 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.

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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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TRANSPORT INFORMATION

LAND (DOT)

Proper Shipping Name: PAINT

Hazard Class & Division: 8

ID Number: 3066

Packing Group: II

Transport Document Name: UN3066, Paint, 8, PG III

SEA (IMDG)

Proper Shipping Name: PAINT, CORROSIVE, FLAMMABLE

Hazard Class & Division: 8 (3)

UN Number: 3470

Packing Group: II

Transport Document Name: UN3470, PAINT, CORROSIVE, FLAMMABLE, 8 (3), PG II

AIR (IATA)

Proper Shipping Name: PAINT, CORROSIVE, FLAMMABLE.

Hazard Class & Division: 8 (3)

UN Number: 3470

Packing Group: II

Transport Document Name: UN3470, PAINT, CORROSIVE, FLAMMABLE, 8 (3), PG II

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REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

[7-26%] Phenol, 4-nonyl-, branched (84852-15-3) TSCA

[0.5-3%] RQ(1000LBS), Phenol (108-95-2) CERCLA, CSWHS, EHS302, EPCRAWPC, GADSL, HAP, MASS, NJHS, OSHAWAC, PA, PRIPOL, SARA313, TOXICPOL, TOXICRCRA, TSCA, TXAIR, TXHWL

[<2%] Aliphatic Amine (Proprietary) (*****) TSCA

[3-19%] n-Aminoethylpiperazine (140-31-8) MASS, PA, TSCA, TXAIR

[<0.3%] Ethanol, 2-[(2-aminoethyl)amino]- (111-41-1) TSCA

[20-40%] Alicyclic Aliphatic Polyamine (Proprietary) (*****) TSCA

[4-15%] Alkylphenol (Proprietary) (*****) TSCA

[4-15%] Alkyletheramine (Proprietary) (*****) TSCA

[5-10%] Solvent naphtha, petroleum, light arom. (64742-95-6) TSCA

[0.1-0.5%] RQ(5000LBS), Cumene (98-82-8) CERCLA, HAP, MASS, NJHS, OSHAWAC, PA, PROP65, SARA313, TOXICRCRA, TSCA, TXAIR, TXHWL

[2-5%] 1,2,4-Trimethylbenzene (95-63-6) MASS, NJHS, PA, SARA313, TSCA, TXAIR

[10-20%] 2-Propenenitrile, polymer with 1,3-butadiene, 1-cyano-1-methyl-4-oxo-4-[[2-(1-piperazinyl)ethyl]amino]butyl-terminated (68683-29-4) TSCA



WARNING

This product can expose you to chemicals including Cumene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Regulatory Code Legend

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- CERCLA = Superfund clean up substance
 - CSWHS = Clean Water Act Hazardous substances
 - EHS302 = Extremely Hazardous Substance
 - EPCRAWPC = EPCRA Water Priority Chemicals
 - GADSL = Global Automotive Declarable Substance List (GADSL)
 - HAP = Hazardous Air Pollutants
 - MASS = MA Massachusetts Hazardous Substances List
 - NJHS = NJ Right-to-Know Hazardous Substances
 - OSHAWAC = OSHA Workplace Air Contaminants
 - PA = PA Right-To-Know List of Hazardous Substances
 - PRIPOL = Clean Water Act Priority Pollutants
 - PROP65 = CA Prop 65
 - RQ = Reportable Quantity
 - SARA313 = SARA 313 Title III Toxic Chemicals
 - TOXICPOL = Clean Water Act Toxic Pollutants
 - TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List)
 - TSCA = Toxic Substances Control Act
 - TXAIR = TX Air Contaminants with Health Effects Screening Level
 - TXHWL = TX Hazardous Waste List

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OTHER INFORMATION

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.

Revision Date: 8/6/2021