

Section 5 - Fire Fighting Measures						
Flash Point (°F): -4 TCC						
LOWER EXPLOSIVE LIMIT (%): UPPER EXPLOSIVE LIMIT (%): 12.						
Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Spray, Sand, Dry Powder	Unusual Fire And Explosion Hazards: Keep containers tightly closed. Isolate from heat, sparks, electrical equipment and open flame. Toxic gases may form product rupture of packages. Application to hot surfaces requires special precautions. Fire or intense heat may cause violent rupture of packages. Remove all sources of ignition. Do not use a cutting or welding torch near or on a drum of product, because vapors may ignite explosively, even if the drum is empty and contains only product residue. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.	Special Fire Fighting Procedures: In the event of fire, wear self-contained breathing apparatus. Firefighters should wear full protective clothing. Flameable. Cool fire-exposed containers using water spray.	Section 6 - Accidental Release Measures	Steps To Be Taken If Material Is Released Or Spilled: Evacuate all non-essential personnel. Remove all sources of ignition. Ventilate area. Contain and remove spilled material with inert absorbent and non-sparking tools. Use personal protective equipment as necessary. Dike to prevent entering any sewer or waterway.	Section 7 - Handling and Storage	Handling: Prevent prolonged breathing of vapors or sprays or mist. Avoid contact with eyes and skin. Do not take internally. Do not handle until the manufacturer's safety precautions have been read and understood. Handle in accordance with good industrial hygiene and safety practice. Keep sway from heat and sources of ignition. Use only in ventilated areas. Use safety precautions with empty containers. Empty containers may contain hazardous materials (product residues) in the form of solids, liquids, or vapors. Do not reuse empty containers without commercial cleaning or reconditioning. Always use groundling leads when transferring from one container to another. Do not drill, solder, pressurize, grind, cut, weld, or braze empty containers. Do not expose empty containers to static electricity, heat, flame, sparks, or any source of ignition. Protect container againist physical damage.
Do not handle until the manufacturer's safety precautions have been read and understood. Handle in accordance with good industrial hygiene and safety practice. Keep sway from heat and sources of ignition. Use only in ventilated areas. Use safety precautions with empty containers. Empty containers may contain hazardous materials (product residues) in the form of solids, liquids, or vapors. Do not reuse empty containers without commercial cleaning or reconditioning. Always use groundling leads when transferring from one container to another. Do not drill, solder, pressurize, grind, cut, weld, or braze empty containers. Do not expose empty containers to static electricity, heat, flame, sparks, or any source of ignition. Protect container againist physical damage.	Storage: Store in buildings designed to comply with OSHA 1910.106. Avoid storing near high temperatures, fire, open flames, and spark sources. Keep containers upright to prevent leakage and tightly closed in a dry, cool, and well-ventilated place.	Section 8 - Exposure Controls / Personal Protection	Component Benzene, 1-Chloro-4-trifluoromethyl CAS# 98-56-6 prolonged or repeated exposure to large amount through breathing or swallowing has been shown to cause damage to the liver and kidneys in animal studies.	BENZENE, 1-CHLORO-4-TRIFLUOROMETHYL AVG. MOL. WT. < 700 BISPHENOL A EPOXY RESIN, ACETONE BENZYL ALCOHOL CARBON BLACK TOLUENE ACETONE BENZYL ALCOHOL CARBON BLACK GROUP 2B: possibly carcinogenic to humans.	Notes	Engineering Controls: Local ventilation of emulsion sources may be necessary to maintain ambient concentrations below permissible OSHA exposure limits. Remove all ignition sources (heat, sparks, flame, and hot surfaces) to prevent eye contact. Wear safety eyewear (safety glasses, safety glasses with side-shields, chemical goggles, or face shields) to prevent eye contact. Other protective equipment: Long sleeve and long leg clothing should be located in immediate work area. Wear boots that are chemical-resistant. Safety shower and eyewash station should be provided before reuse of discarded. Remove and wash contaminated clothing before reuse.
Permissible Controls: Local ventilation of emulsion sources may be necessary to maintain ambient concentrations below permissible OSHA exposure limits. Remove all ignition sources (heat, sparks, flame, and hot surfaces) to prevent eye contact. Eye protection: Wear solvent-resistant gloves.	Hazardous Properties: Wash hands before breaks, eating, smoking, using washroom, and at the end of the workday. Other protective equipment: Long sleeve and long leg clothing is recommended. Remove and wash contaminated clothing before reuse of discarded. Safety shower and eyewash station should be located in immediate work area. Wear boots that are chemical-resistant.	Section 9 - Physical and Chemical Properties	Boiling Range (°F): 133 - 396 Vapor Density: Heavier than air	Chemical Properties: Wash hands before breaks, eating, smoking, using washroom, and at the end of the workday.		

CERCLA - SARA Hazard Category

Section 11 - Toxicological Information		Section 12 - Ecological Information		Section 13 - Disposal Information		Section 14 - Transportation Information		Section 15 - Regulatory Information	
Product LD50: N.E.		Product L _C 50: N.E.		Eco-logical Information: No information.		Disposal Information: Dispose of waste in accordance with federal, state, and local environmental regulations. Empty containers will contain product residue and flammable vapors. Handle as hazardous material. Do not incinerate closed containers. EPA Hazardous Waste Number/Code: D001, F003, F005. Hazardous Waste Characteristics: Ignitability and Reactivity.		DOT Proper Shipping Name: Paint	
								DOT Technical Name: N.A.	
								DOT Hazard Class: N.A.	
								DOT UN/NA Number: UN-1263	
								Resp. Guide Page: N.A.	
								IATA: REGULATED	

Conditions To Avoid: Avoid high temperatures, sparks, or open flames. Avoid uncontrolled reactions with amines. Do not breathe vapors or spray mist.

Incompatibility: Material is incompatible (reacts) with strong oxidizing agents, strong acids (Lewis and mineral), with amine and mercaptans. Also, is incompatible with reducing agents, chromic anhydride, chromyl alcohol, hexachloroethane, and hydrogen peroxide, permanganic acid, chloroform, alkalis, chlorine compounds, potassium t-butoxide, and thioglycol. Material is incompatible with acids and bases. Reacts with amines and mercaptans.

Hazardous Decomposition: Thermal decomposition can lead to the generation and release of gases containing fluorine or chlorine.

Carbon Monoxide: Carbon dioxide, aldehydes, and acids (organic). May produce gases containing fluorine or chlorine.

Stability: Stable under recommended storage conditions. Benzyl alcohol, a component of this formulation, is incompatible with aluminum, iron, strong mineral acids, and strong oxidizing agents.

Section 10 - Stability and Reactivity

Order:	O.D.	ACETONE SOLVENTS	Black Liquid	Apppearance: ND	Solubility in H ₂ O: ND	Freeze Point: N.D.	Vapor Pressure, mm Hg: 12.	Liquid Physical State: N.A.	SECONDS (< 20 cps)
Odor:	N.D.	Odor Threshold:	ND	Evaporation Rate:	ND	Specific Gravity:	1.303	Viscosity:	> 18 # ZAHN CUP
Odor:	O.D.	Odor Threshold:	ND	Evaporation Rate:	ND	Specific Gravity:	N.D.	Viscosity:	> 18 # ZAHN CUP
Odor:	O.D.	Odor Threshold:	ND	Evaporation Rate:	ND	Specific Gravity:	ND	Viscosity:	> 18 # ZAHN CUP
Odor:	O.D.	Odor Threshold:	ND	Evaporation Rate:	ND	Specific Gravity:	ND	Viscosity:	> 18 # ZAHN CUP

California Proposition 65:	
Warning: The following ingredients present in the product are known to the state of California to cause Cancer.	
Compoment	CAS Number
EPOXY RESIN	25036-25-3
Warining: The following ingredients present in the product are known to the state of California to cause Cancer.	25036-25-3
Other reproductive hazards.	
Compoment	CAS Number
CARBON BLACK	1333-86-4
FORMALDEHYDE	1,4298
ETHYL ACRYLATE	0.0003
ETHYL PYRROLIDONE	0.0000
TOLUENE	108-88-3
1-METHYL-2-PYRROLIDONE	0.0018
International Regulations: As follows -	
CANADIAN WHMIS:	
use of the 16 headmings.	
CANADIAN WHMIS CLASS: B2, D2B	
Section 16 - Other Information	
HMIS Ratings:	
Health: 1	Flammability: 3
NFPA Health Rating: 2	NFPA Fire Rating: 3
NFPA Specific Hazard Rating: NA	NFPA Stability Rating: 1
VOLATILE ORGANIC COMPOUNDS, GR/LTR: 218	
VOLATILE ORGANIC COMPOUNDS MIXED, GR/LTR: <= 340	
VOLATILE ORGANIC COMPOUNDS MIXED, LB/GAL: 1.82	
VOLATILE ORGANIC COMPOUNDS, LB/GAL: 1.40	
VOLATILE ORGANIC COMPOUNDS, LB/LB-SOLID: <= 0.20	
VOLATILE ORGANIC COMPOUNDS, LB/LB-SOLID: <= 0.20	
VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), GR/LTR: 168	
VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), LB/GAL: 1.40	
REASON FOR REVISION: UPDATED SPECIFICATION REFERENCE	
REGULATORY CODE: 01BK043	
LAZOUT CODE: A2004R	
Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined	
The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.	

Section 5 - Fire Fighting Measures					
Fifth Point (F): 72 LOWER EXPLOSIVE LIMIT (%): UPER EXPLOSIVE LIMIT (%): ND					
Plenty of water and wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse or discard. If shock occurs, take measures to treat condition.	First Aid - Inhalation: Move to fresh air in case of accidental inhalation of vapors. Give oxygen or artificial respiration if needed. Asthmatic type symptoms may develop and may be immediate or delayed by several hours. In the case of inhalation of aerosol/mist, consult a physician, if necessary.	Fire Fighting Measures	First Aid - Ingestion: Do not induce vomiting. Do not give anything to an unconscious person. Obtain medical help.	Unusual Fire And Explosion Hazards: Carbon Dioxide, Dry Chemical, Foam, Water Spray, Dry Sand, Dry Powder	Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Spray, Dry Sand, Dry Powder
Plenty of water and wash affected areas thoroughly with soap and water. Wash contaminated clothing thoroughly before reuse or discard. If shock occurs, take measures to treat condition.	First Aid - Inhalation: Move to fresh air in case of accidental inhalation of vapors. Give oxygen or artificial respiration if needed. Asthmatic type symptoms may develop and may be immediate or delayed by several hours. In the case of inhalation of aerosol/mist, consult a physician, if necessary.	Fire Fighting Measures	First Aid - Ingestion: Do not induce vomiting. Do not give anything to an unconscious person. Obtain medical help.	Unusual Fire And Explosion Hazards: Carbon Dioxide, Dry Chemical, Foam, Water Spray, Dry Sand, Dry Powder	Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam, Water Spray, Dry Sand, Dry Powder
Steps To Be Taken If Material Is Released Or Spilled: Evacuate all non-essential personnel. Remove all sources of ignition. Ventilate area. Contain and remove spilled material with inert absorbent and non-sparking tools. Use personal protective equipment as necessary. Dilute to prevent entering any sewer or waterway. Dilute to prevent entering any sewer or waterway. Transfer liquid to a holding container.	Handling: Prevent prolonged breathing of vapors or spray mist. Avoid contact with eyes and skin. Do not take internally. Do not handle until the manufacturer's safety precautions have been read and understood. Handle in accordance with good industrial hygiene and safety practice. Keep away from heat and sources of ignition. Use safety precautions with empty containers. Empty containers may contain hazardous materials (product residues) in the form of solids, liquids, or vapors. Always use grounding leads when transferring materials from one container to another.	Section 7 - Handling and Storage	Storage: Store in buildings designed to comply with OSHA 1910.106. Avoid storing near high temperatures, fire, open flames, and spark sources. Keep containers upright to prevent leakage and tightly closed in a dry, cool, and well-ventilated place.	Notes	BENZYL ALCOHOL CAS# 100-51-6 - In laboratory studies, Benzyl alcohol has been shown to cause harm to the fetuses of animals. Significance of these findings in humans is unknown.
Components	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	2-BUTANOL (SECONDARY)
100 ppm	100 ppm	100 ppm	100 ppm	100 ppm	BUTANOL
BENZYL ALCOHOL	N.E.	N.E.	N.E.	N.E.	4,4'-METHYLENBIS(CYCLOHEXANAMINE)
	N.E.	N.E.	N.E.	N.E.	TRIETHYLBENZENTRAMINE
	N.E.	N.E.	N.E.	N.E.	

Section 8 - Exposure Controls / Personal Protection					
Component	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA STEL	2-BUTANOL (SECONDARY)
BUTANOL	100 ppm	100 ppm	100 ppm	100 ppm	BUTANOL
BENZYL ALCOHOL	N.E.	N.E.	N.E.	N.E.	4,4'-METHYLENBIS(CYCLOHEXANAMINE)
	N.E.	N.E.	N.E.	N.E.	TRIETHYLBENZENTRAMINE
	N.E.	N.E.	N.E.	N.E.	

Section 9 - Physical and Chemical Properties					
Boiling Range (°F): 211 - 211 Vapor Density:	SECONDAIRY BUTANOL & BENZYL	ALCOHOL SOLVENTS	Order Threshold:	> 1 (AIR = 1)	Order:

Appearance: Solubility in H ₂ O: ND	Ambient liquid	Evaporation Rate:	ND	Apparelance:	Solubility in water.
Vapor Pressure: mm Hg: 8.6	N.D.	Specific Gravity:	0.930	Vapor Pressure:	Vapor Pressure: mm Hg: 8.6
Physical State: Liquid	N.A.	PH:	> 100 cps (mPa-s)	Physical State:	(See section 16 for abbreviation legend)
Viscosity:	N.A.	Specific Gravity:	> 100 cps (mPa-s)	Viscosity:	Viscosity:
Freeze Point:	N.D.	Order Threshold:	N.D.	Freeze Point:	Freeze Point:

Other protective equipment: Long sleeve and long leg clothing is recommended. Remove and wash contaminated clothing before reuse or discard. Safety shower and eyewash station should be located in immediate work area. Wear boots that are chemical-resistant.	Eye Protection: Wear safety eyewear (safety glasses, safety glasses with side-shields, chemical goggles, or face shields) to prevent eye contact.	Respiratory Protection: A respirator for organic vapors, mists, and fumes) is necessary if purifying, fresh air supplied, or NIOSH certified respirator for organic vapors, mists, and fumes) is required.	Permissible exposure limits: Remove all ignition sources (heat, sparks, flame, and hot surfaces).	Engineering Controls: Local ventilation of emission sources may be necessary to maintain ambient concentrations below permissible OSHA exposure limits. Remove all ignition sources (heat, sparks, flame, and hot surfaces).	Notes
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CANADIAN WHMIS CLASS: B2, D1B, D2B

use of the 16 headings.

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the

International Regulations: As follows -

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

California Proposition 65:

The following non-hazardous ingredients are present in the product at greater than 3%.

CAS Number	Component	Polyamide Resin
129733-57-9	AMINE	

The following materials are non-hazardous, but are among the top five components in this product.

CAS Number	Component	Polyamide Resin
129733-57-9	AMINE	

New Jersey Right-to-Know:

U.S. State Regulations: As follows -

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

Toxic Substances Control Act:

CAS Number	Z-BUTANOL (SECONDARY BUTANOL)	Percent By Weight
78-92-2	37.5000	

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and 40 CFR part 372.

SARA Section 313:

This product has been reviewed according to the EPA Hazard Categories, promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD

CERCLA - SARA Hazard Category

DOT Proper Shipping Name:	Paint	Section 15 - Regulatory Information
DOT Technical Name:	N.A.	DOT UN/NA Number:
DOT Hazard Class:	Hazard Subclass:	FLAMMABLE LIQUID 3
DOT Packaging Group:	I	Resp. Guide Page:
DOT Label:	N.A.	DOT UN/NA Number:
DOT Hazard Class:	Regulated	IATA:

Section 15 - Regulatory Information

Disposal Information: Dispose of waste in accordance with federal, state, and local environmental regulations. Empty containers. EPA Hazardous Waste Number/Code: D001. Handle as hazardous material. Do not incinerate closed containers. Disposal Information: Dispose of waste in accordance with federal, state, and local environmental regulations. Empty

Section 14 - Transportation Information

Eco logical Information: No information.

Section 12 - Ecological Information

Product LD50: N.E.

Section 11 - Toxicological Information

Stability: Stable under recommended storage conditions. Benzyl alcohol, a component of this formulation, is incompatible with aluminum, iron, strong mineral acids, and strong oxidizing agents.

Section 10 - Stability and Reactivity

Conditions To Avoid: Avoid high temperatures. Epoxy resins under uncontrolled conditions. Do not breathe vapors or spray mist.

Incompatibility: Epoxy resins under uncontrolled conditions.

Hazardous Decomposition: Thermal decomposition can lead to the generation and release of gases and vapors including carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons.

Hazardous Polymerization: Will not occur.

Stability: Epoxy resins under uncontrolled conditions. Do not breathe vapors or

HMIS Ratings:
Health: 2
Flammability: 3
Reactivity: 0
Personal Protection: G

NFPA Fire Rating: 3
NFPA Health Rating: 2
NFPA Specific Hazard Rating: NA
NFPFA Stability Rating: 1

VOLATILE ORGANIC COMPOUNDS, GR/LTR: 589
VOLATILE ORGANIC COMPOUNDS MIXED, GR/LTR: <= 340
VOLATILE ORGANIC COMPOUNDS MIXED, LB/GAL: <= 2.8
VOLATILE ORGANIC COMPOUNDS, LB/LB-SOLID: <= 1.73
VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), GR/LTR: 589
VOLATILE ORGANIC COMPOUNDS OF MATERIAL (SCAQMD RULE 443.1), LB/GAL: 4.92
REASON FOR REVISION: UPDATED DISPOSAL INFORMATION
REGULATORY CODE: 80X109
LAYOUT CODE: A2004R
Legends: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined
The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.