Material Safety Data Sheet

443-3-R66

Manufacturer's Name	SIKKENS AEROSPACE FINISHES DIVISION	Emergency Telephone No.	(213) 320-6800
Address	20846 S. Normandie Avenue Torrance, California 90502	Other Information Calls	(213) 320-6800
Signature of Person Responsible for Preparation	Lee A Wickinson	Date Prepared	May 1986

SECTION 1 - IDENTITY

Common Name: (used on label) Epoxy

Metal Free ( )
Metal Bearing (X)

Trade Name & Synonyms: 443-3 Series 3:1 With X-304

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Components: (chemical & common names)		Cas No.	% Wt.	ACGIH Threshold Limit Value PPM	ACGIH Threshold Limit Value MG/M³	OSHA Permissible Exposure Limit PPM	OSHA Permissible Exposure Limit MG/M³	LEL	Vapor Pressure mm
Flamable Liquid Class IB									
Methyl Ethyl Ketone		78-93-3	20-25	200	590	200	590	1.8	70
Toluene	(Skin)	108-88-3	5-10	100	375	—	—	1.2	22
Xylene	(Skin)	1330-20-7	5-10	100	435	100	435	1.0	7
N-Butyl Acetate		123-86-4	5-10	150	710	150	710	1.7	8
2-Butoxyethanol	(Skin)	111-76-2	<5	25	120	50	240	1.1	1
N-Butyl Alchohol	(Skin)	71-36-7	<5	C50	C150	100	300	1.7	4
Chromate Compounds as:									
	Pb	7439-92-1	<.02	—	.15	—	.05	—	—
	Cr	7440-473	<.01	—	0.5	—	0.5	—	—

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Range: 176 To 340°F
Specific Gravity (H₂O=1): 1.19
Vapor Pressure (mm Hg): 1 To 70

Percent Volatile by Volume (%): 61%
Vapor Density (Air = 1): >1
Evaporation Rate (_____ = 1): Slower Than Ether

Solubility in Water: Negligible
Reactivity in Water: Negligible

Appearance and Odor: White liquid Ketone/fruity odor

Flash Point: 23°F TCC
Flammable Limits in Air % by Volume: Lower 1.0 Upper —
Extinguisher Media: Foam, CO_2, Dry Chemicals
Auto-Ignition Temperature: NF

Special Fire Fighting Procedures: Use water spray only to cool surface and protect personnel. Exclude air. Steam and/or water fog may be used.

Unusual Fire and Explosion Hazards: Do not use water. Vapor forms explosive mixture with air between upper and lower explosion limits. Unopened containers may rupture when hot.

Stability Unstable ☐ Stable XX Conditions to Avoid: Storage at High Temperature

Incompatability (Materials to Avoid): Strong Oxidizing Agents, Inorganic Acids, Sparks and Open Flames. Contact with Moisture.

Hazardous Decomposition Products: On Combustion, CO, CO_2, Lead and Chromium Oxides.

Hazardous Polymerization: May Occur ☐ Will Not Occur XX Conditions to Avoid: None

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value: See Section II

Signs and Symptoms of Exposure — 1. Acute Overexposure: Headache, Nausea, Dizziness, Skin Irritation.

2. Chronic Overexposure: Breathing Vapors Will Be Irritating to Nose, Throat & Eyes. Dermatitis for Skin

Medical Conditions Generally Aggravated by Exposure: Dermatitis. Chronic Respiratory Disease.

Chemical Listed as Carcinogen or Potential Carcinogen: None

National Toxicology Program: Yes ☐ No XX

I.A.R.C. Monographs: Yes ☐ No XX

OSHA: Yes ☐ No XX

OSHA Permissible Exposure Limit: See Section II

ACGIH Threshold Limit Value: See Section II

Other Exposure Limit Used:

Emergency and First Aid Procedures

1. Inhalation: Remove Victim to Fresh Air, Adminster Oxygen. Consult Physician.

2. Eyes: Flush with Copious Amounts of Water for at Least 15 Minutes. Consult Physici

3. Skin: Remove Contaminated Clothing. Flush Skin with Water.

4. Ingestion: Consult Physician Immediately. Do Not Induce Vomiting.

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): Air Supplied, Self Contained Respirator in Confined Areas.

Ventilation: To Keep Contaminated Concentration Below The TLV

Mechanical (General): Explosion Proof Ventilation

Special

Other: Equipment.

Protective Gloves: Chemically Resistant Gloves.

Eye Protection: Safety Glasses, Goggles, or Face Shields

Other Protective Clothing or Equipment: Long Sleeves, Protective Apron, Eye Bath and Safety Shower.

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Keep Containers Closed When Not In Use. Do Not Handle or Store Near Flames, Heat, Strong Oxidents. Adequate Ventilation Required.

Other Precautions: Empty Containers May Be Hazardous, Fumes Are Very Flammable. All Equipment Should Be Electrically Grounded. DO NOT WELD EMPTY CONTAINERS.

Steps to be Taken in Case Material is Released or Spilled: Eliminate Source of Ignition. Ventilate Area. Prevent Entering Sewers or Drains. Contain Spill with Sawdust or Other Absorbant. Clean Area.

Waste Disposal Methods: Treat as Hazardous Waste. Consult Chemical Waste Disposal and/or Treatment Entity. Refer to Section VI.

IMPORTANT

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate

Material Safety Data Sheet

X-304

Manufacturer's Name	SIKKENS AEROSPACE FINISHES DIVISION	Emergency Telephone No.	(213) 320-6800
Address	20846 S. Normandie Avenue Torrance, California 90502	Other Information Calls	(213) 320-6800
Signature of Person Responsible for Preparation	Antonio A. Velazquez	Date Prepared	November, 1985

SECTION 1 - IDENTITY

Common Name: (used on label) Amine Catalyst

Metal Free [X]
Metal Bearing [ ]

Trade Name & Synonyms: Curing Solution for 400-3 Series

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common name(s))	Cas No.	% Wt.	ACGIH Threshold Limit Value PPM	ACGIH Threshold Limit Value MG/M³	OSHA Permissible Exposure Limit PPM	OSHA Permissible Exposure Limit MG/M³	LEL	Vapor Pressure (mm Hg)
Flammable Liquid Class 1B								
Methyl Ethyl Ketone	78-93-3	25-30	200	590	200	590	1.8	70
n Butyl Alcohol (Skin)	71-36-3	20-25	C50	C150	100	300	1.7	4
n Butyl Acetate	123-86-4	20-25	150	710	150	710	1.7	8
2 Butoxyethanol (Skin)	111-76-2	10-15	25	120	50	240	1.1	1
Toluene (Skin)	108-88-3	5-10	100	375	--	--	1.2	22
Diethylene Triamine	111-40-0	<1	1	4	--	--	1.4	<1

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Range: 176 to 340° F

Specific Gravity (H_2O=1): 0.85

Vapor Pressure (mm Hg): 1 to 70

Percent Volatile by Volume (%): 75

Vapor Density (Air = 1): >1

Evaporation Rate (_____ = 1): Slower than ether

Solubility in Water: Negligible

Reactivity in Water: Negligible

Appearance and Odor: Straw Clear, Amine, Ketone odor

Flash Point: 23°F. TCC

Flammable Limits in Air % by Volume: Lower 1.0 Upper -

Extinguisher Media: Foam, CO_2, Dry Chemicals

Auto-Ignition Temperature: NF

Special Fire Fighting Procedures: Use water spray only to cool surface and protect personnel. Exclude air. Steam and/or water fog may be used.

Unusual Fire and Explosion Hazards: Do not use water. Vapor forms explosive mixture with air between upper and lower explosion limits. Unopened containers may rupture when hot.

SECTION 4 - PHYSICAL HAZARDS

Stability: Unstable ☐ Stable ☒ — Conditions to Avoid: Storage at high temperature.

Incompatability (Materials to Avoid): Strong oxidizing agents. Inorganic acids. Sparks and open flames.

Hazardous Decomposition Products: On combustion CO, CO_2, Oxides of nitrogen.

Hazardous Polymerization: May Occur ☐ Will Not Occur ☒ — Conditions to Avoid: None

SECTION 5 - HEALTH HAZARDS

Threshold Limit Value: See Section II

Signs and Symptoms of Exposure — 1. Acute Overexposure: Headache, nausea, dizziness, skin irritation.

2. Chronic Overexposure: Severe burning at the eyes, nose throat and skin irritation.

Medical Conditions Generally Aggravated by Exposure: Chronic respiratory disease. Sensitive skin may develop dermatitis.

Chemical Listed as Carcinogen or Potential Carcinogen: None

National Toxicology Program: Yes ☐ No ☒

I.A.R.C. Monographs: Yes ☐ No ☒

OSHA: Yes ☐ No ☒

OSHA Permissible Exposure Limit: See Section II

ACGIH Threshold Limit Value: See Section II

Other Exposure Limit Used:

Emergency and First Aid Procedures

1. Inhalation: Remove victim to fresh air, administer oxygen. Consult physician.

2. Eyes: Flush with copious amounts of water for at least 15 minutes. Consult physician.

3. Skin: Remove contaminated clothing. Flush skin with water.

4. Ingestion: Consult physician immediately. Do Not Induce Vomiting.

SECTION 6 - SPECIAL PROTECTION INFORMATION

Respiratory Protection (Specify Type): Air supplied, self contained respirator in confined areas.

Ventilation: To keep contaminated concentration below the TLV

Mechanical (General): Explosion proof ventilation

Special

Other: equipment.

Protective Gloves: Chemically resistant.

Eye Protection: Safety glasses, goggles or face shield.

Other Protective Clothing or Equipment: Long sleeves, protective apron, eye bath and safety shower.

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage: Keep containers closed when not in use. Do not handle or store near flames, heat, strong oxidents. Adequate ventilation required.

Other Precautions: Empty containers may be hazardous; fumes are very flammable. all equipment should be electrically grounded. DO NOT WELD EMPTY CONTAINERS.

Steps to be Taken in Case Material is Released or Spilled: Eliminate source of ignition. Ventilate area. Prevent from entering sewers or drains. Contain spills with sawdust or other absorbant. Clean area.

Waste Disposal Methods: Treat as hazardous waste. Consult chemical waste disposal and/or treatment entity. Refer to Section VI.

IMPORTANT

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.