



MATERIAL SAFETY DATA SHEET

Revision Date: 05/02/2013
Date Issued: 05/02/2013

AEROPOXY® 50 JET

I. PRODUCT AND COMPANY IDENTIFICATION

NAME: AEREPOXY® 50 JET
PRODUCT CLASS: BISPHENOL "A"
CHEMICAL FAMILY: EPOXY
SALUD: DANGEROUS.

INFORMATION

MANUFACTURER/SUPPLIER: EL NERVION S.A DE C.V.
ALDAMA # 5, SAN. JERÓNIMO TEPETLACALCO,
TLALNEPANTLA, EDO. MÉXICO, 54090
MÉXICO
TELEPHONE: +52(55) 5361-0207
FAX: +52(55) 5361-9476

II. COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	COMPONENTS	CAS NUMBER	CONCENTRATION [%]
01	EPOXY SOLVENT	MIX	9.0
02	ISOBUTYL METHYL KETONE	108-10-1	8.0
03	EPOXY RESIN	25036-25-3	27.8
04	XILENE	1330-20-7	8.5
05	PIGMENTS	MIX	15.0
06	ADDITIVES	MIX	1.20
07	UREA FORMALDEHYDE RESIN	CONFIDENTIAL	3.5
08	VINYL CHLORIDE TERPOLYMER OF VINYL ACETATE	25086-48-0	3.5
09	EB GLYCOL	111-76-2	3.5
10	MAGNESIUM SILICATE	14807-96-6	10.0
11	CALCIUM SILICATE	N/D	5.0
12	ZINC PHOSPHATE	7779-90-0	5.0

III. HAZARDS IDENTIFICATION

Emergency Over

Physical Appearance

Form: Liquid
Color: greenish
Odor: Aromatic
Solubility in water: Insoluble



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pH: N/A

EFFECTS OF EXPOSURE: Flammable. Could be released gas / toxic fumes during combustion and / or thermal decomposition. A closed container can explode with extreme heat. Use cold water spray to cool containers to minimize fire risk of rupture. Vapors or mist may pose a risk of fire and explosion when exposed to extreme heat or ignition. Vapors may travel to areas outside the work place before turning on / back to vapor source. Ground containers and equipment before transfer to avoid static sparks. It has been associated with prolonged and repeated occupational exposure to solvents with brain and nervous system permanently. Intentional misuse by deliberately concentrating or inhaling solvents can be harmful or fatal. Cause respiratory tract irritation. May cause allergic respiratory reactions. Harmful if inhaled. Airways. The damage to the lungs and respiratory sensitization may be permanent. Cause skin irritation. May cause allergic skin reaction.

Potential Health Effects

The **EXPOSURE** (prolonged or repeated use) may aggravate or accentuate any of these effects.

SKIN CONTACT: Irritating. Harmful in contact with the skin. Causes burns to skin. Symptoms of overexposure may be headache, dizziness, fatigue, nausea and vomiting.

INHALATION: Irritating. Inhalation of aerosol may cause irritation of upper respiratory tract. May cause severe burns tract, eyes, skin and respiratory tract. May cause nose, throat and lungs. Inhalation of vapors and / or aerosols in high concentration can cause respiratory tract irritation.

EYE CONTACT: Irritating. Cause eye burns. It can cause blindness. Severe eye irritation.

INGESTION: : Harmful if swallowed. If swallowed, severe burns of the mouth and throat and danger of perforation of the esophagus and stomach.

MEDICAL CONDITIONS AGGRAVATED: Eye disorders skin disease and allergies. Adverse effects on the skin (such as rash, irritation or corrosion). adverse eye effects (such as conjunctivitis or corneal damage). Asthma. Adverse respiratory effects (such as cough, chest tightness or difficulty breathing).

PRIMARY ROUTE (S) OF ENTRY: Skin contact, Inhalation, Contact, Ingestion, Eyes.

IV. FIRST AID MEASURES

GENERAL ADVICE

Consult a doctor. If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.



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Inhalación

If inhalation of mists or spray, turn the person and take it to a cool place. Appearance of possible discomfort include severe irritation of the lining of the (nose, throat and eyes), sneezing, coughing and flow of the tears. In case of persistent discomfort, seek medical attention immediately. If breathing is stopped or is labored give assisted respirations, supplemental oxygen may be indicated. If the heart has stopped trained personnel should begin CPR immediately, move to fresh air.

Skin Contact

Remove contaminated clothing and any chemical that strange, if possible without delay. Wash immediately with water for at least 20 minutes. Cover wound with sterile gauze. Remove contaminated clothing and shoes.

NOTE TO PHYSICIANS:

Application corticosteroid cream has been effective in treating skin irritation.

Eye Contact:

In case of contact, immediately flush eyes with water for at least 15 minutes, or if necessary with an eyewash solution. If an upset persistent, consult an ophthalmologist.

Ingestion

In case of malaise seek medical advice immediately. Do not induce vomiting. If the person vomits and is lying on her back, will be placed in recovery position to avoid aspiration of vomit, turn the victim's head to one side.

V. FIRE-FIGHTING MEASURES

FLASH POINT:	93,2°F(34°C) References (Pensky-Martens Closed Cup ASTM D 93)
LOWER EXPLOSIVE LIMIT:	1.1% (air volume) Bibliography (xylene)
UPPER EXPLOSIVE LIMIT:	7.0% (air volume) Bibliography (xylene)
AUTOIGNITION TEMPERATURE:	Bibliography 869°F (465°C) (xylene)
FLAMMABLE-OSHA:	COMBUSTIBLE - CLASS III
CLASSIFICATION FLAMMABILITY-OSHA:	FLAMMABLE LIQUID

EXTINGUISHING MEDIA: Alcohol resistant foam, carbon dioxide, dry chemical, water fog (water spray for large fires), dry sand, limestone powder.

SPECIFIC RISKS FIRE FIGHTING: In case of fire, cool containers at risk with water. Closed containers may explode if heated strongly. Flammable liquid. The fumes can reach an ignition source and generate a setback. Explosive mixtures are formed at temperatures at or above the flash point. The staff at risk is downwind should be evacuated.

EXTINGUISHING MEDIA SHOULD NOT BE USED FOR SAFETY: Not applicable.



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SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS: As in any fire, wear self-contained positive-pressure breathing apparatus (MSHA / NIOSH approved or equivalent) and full protective gear.

HAZARDOUS DECOMPOSITION CAUSED BY: Incomplete combustion can generate carbon monoxide, carbon dioxide, toxic gases or fumes.

FLAMMABLE CLASSIFICATION-OSHA: Combustible liquid, Class III.

VI. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Wear appropriate protective clothing, gloves and eye / face. Use SCBA and chemical protective clothing. Evacuate personnel to safe areas.

WHAT TO DO IN CASE OF SPILL: Ventilate the area, remove or remove possible sources of sparks or flame and stir-absorbent inert material.

WHAT TO DO IN CASE OF SPILL:

- ◆ **SMALL SPILL:** Absorb liquid on paper, vermiculite, FLOORS OR OTHER ABSORBENT MATERIAL ABSORBING AND DISPOSE IN THE PROPER LINK.
- ◆ **LARGE SPILL:** REMOVE ALL SOURCES OF IGNITION. PEOPLE WITHOUT PROTECTIVE EQUIPMENT SHOULD BE EXCLUDED BECAUSE OF THE SPILL AREA UNTIL YOU HAVE BEEN COMPLETELY CLEAN. STOP THE SOURCE OF SPILL, BUILD A DAM ABOUT THE SPILL AREA TO PREVENT SPREAD THE SPILL IS. PUMPING LIQUID TANK FOR FREE. COLLECT LEAKING LIQUID WHICH HAS BEEN IMPREGNATED WITH SAND, EARTH AND DEPOSIT FLOOR ABSORBENT IN A CONTAINER. REMAINS WILL PREVENT THE STREAMS OR OTHER BODIES OF WATER. IF A LEAK OCCURS, NOTIFY AUTHORITIES FOR THAT A SPILL HAS OCCURRED.

WASTE DISPOSAL METHOD:

◆ **SMALL SPILL:** ALLOW VOLATILE evaporate PARTIES, TAKING THE TIME TO ENOUGH VAPORS ARE COMPLETELY DISSIPATED. HAVE THE REMNANTS OF MATERIAL IN ACCORDANCE WITH APPLICABLE REGULATIONS.

LARGE SPILL: DESTROY BY BURNING LIQUID. CONTAMINATED ABSORBENT MATERIAL IN A LANDFILL DEPOSIT ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.

VII. HANDLING AND STORAGE

HANDLING

General procedure for handling

Tips for safe handling: Use gloves chemically resistant to this materials. Examples of barrier materials preferred glove include: Polyethylene, Ethyl vinyl alcohol laminate (EVAL) Alcohol Polyvinyl ("PVA") Viton.



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Examples of barrier materials acceptable glove Neoprene butyl rubber. Natural rubber ("Latex") Chloride Polyvinyl ("PVC" or vinyl) Nitrile / butadiene rubber ("nitrile" or "NBR").
NOTE: The selection of a specific glove for a particular application and duration in the place work should take into consideration relevant factors in the workplace such as, but not limited to: Other chemicals that may be handled, requirements physical (protection against cuts / punctures, dexterity, thermal protection), allergies potential to own glove material, and instructions / specifications given by glove supplier. Use respiratory protection when applied by spray. Ensure adequate ventilation.
Use only in well ventilated areas. Avoid breathing vapors or aerosols. Avoid contact with skin and eyes. Showers eyewash stations and emergency tions must be easily accessible. They obey and must follow the rules work practices established by government regulations. Avoid contact with eyes. Use equipment personal protection. When using the Material NOT EAT, DRINK OR SMOKE.

Advice on protection against fire and explosion: Take steps to prevent static charges, keep away from sources of ignition.

STORAGE

Requirements for storage areas and containers.

Keep containers tightly closed in a cool, dry, well-ventilated area.

life:

12 months @ 77°F (25°C): After date of manufacture.

Additional information

Keep tightly sealed in its original packaging, do not store in reactive metal containers.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures

Provide good ventilation if vapors / spray form.
Provide natural ventilation or explosion proof adequate to ensure that concentrations are kept below the limit of exposure.

Personal Protective Equipment

General precautions: Avoid contact with eyes and skin.

Hygiene measures: Do not smoke, eat or drink while using this product.
Wash hands before breaks and after work shift or using the



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Toilet.

Respiratory Protection: Wear appropriate respirator when ventilation is inadequate. In case of vapor / aerosols: Team respiratory protection, cartridges for organic gases and vapors.

Hand Protection: Use gloves chemically resistant to this materials. Examples of barrier materials preferred glove include: Polyethylene, Ethyl vinyl alcohol laminate (EVAL) Alcohol Polyvinyl ("PVA") Viton. Examples of barrier materials acceptable glove Neoprene butyl rubber. Natural rubber ("Latex") Chloride Polyvinyl ("PVC" or vinyl) Nitrile / butadiene rubber ("nitrile" or "NBR").

Eye Protection: Safety glasses should be worn resistant.

Protective Clothing: Light protective clothing is required.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Form: Viscous Liquid
Color: Greenish
Odor: Aromatic
Solubility in water: Insoluble
pH: Not determined
Melting Point: Not applicable
Boiling point: Bibliography 280,4 - 291,2 °F (Xylene)
Vapor pressure: 9.5 mmHg a 77°F (25°C) References (Xylene)
Flah point: 93,2°F (34°C) References (Pensky-Martens Closed Cup ASTM D 93)
Density: 1.3000 - 1.5000 g/cm³
Viscosity: 2,000 - 3,000 cPs

X. STABILITY AND REACTIVITY

Thermal decomposition: Not determined

Hazardous reactions: No hazardous reactions known if handled and stores the material properly.

Hazardous Polymerization: Not

Stability: This product is stable under normal conditions storage.

Hazardous decomposition

products (BY FIRE, BURN OR WELDING): Carbon dioxide (CO₂), Carbon monoxide (CO), toxic gases, fumes, compounds phenolics.



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Materials to avoid: Avoid contact with oxidizing materials. Avoid contact with: Acids. Bases. Avoid contact accidental amines.

Conditions to Avoid: Heat, open flame, electric arc and sparks.

Hazardous reactions: No particular.

XI. INFORMACIÓN TOXICOLÓGICA

LD50 (ACUTE ORAL TOX): LD50 is estimated to be over 2,000 mg / kg (rats)
LD50 (ACUTE DERMAL TOX): LD50 is estimated to be over 2,000 mg / kg (rabbits)
LD50 (ACUTE INHALATION TOX): LC 50:> 4,000 ppm (rats)
EFFECTS OF CHRONIC EXPOSURE: No Available.

AWARENESS: Dermal: Data presented refer to the compound following: epoxy resin. Reactions caused Allergic skin tests on guinea pigs. Inhalations: No information found significant.

CARCINOGENICITY: Ethylbenzene has been identified by lead cancer in laboratory animals. Xylene resulted be not carcinogenic according to a Toxicology Program National (USA) bioassay in rats and mice. Similar epoxy resins did not cause cancer animals in long-term studies.

REPRODUCTIVE TOXICITY: Based on information about (the) component (s); xylene. In animal studies, does not interfere Reproduction.

TERATOGENICITY: Similar resins have shown some toxicity genetic testing in vitro, while other no. The data presented are for the material following: Xylene. Ethylbenzene. Studies In vitro genetic toxicity have produced results negative. For components tested: The studies genetic toxicity in animals gave results Negative.

MUTAGENICITY: Similar resins have shown some toxicity genetic testing in vitro, while other no. The data presented are for the material following: Xylene. Ethylbenzene. Studies In vitro genetic toxicity have produced results negative. For components tested: The studies genetic toxicity in animals gave results negative.



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XII. INFORMACIÓN ECOLÓGICA

Data for Component: Polymer with 2,2 '- [(1-methylethylidene) bis (4,1-fenilenoximetilen)] bis [oxirane) and 4,4 '- (1-methylethylidene) bisphenol (DGE BPA based polymer).

Not expected to be acutely toxic but may cause adverse effects by means physical and / or mechanical.

Data for Component: Xylene

The product is moderately toxic to aquatic organisms on an acute (LC50/EC50 varies between 1 and 10 mg / L in most sensitive species tested).

Prolonged Toxicity Fish Acute

LC50 Rainbow trout (Oncorhynchus mykiss), 96 h: 9.2 mg/L

Acute Toxicity to Aquatic Invertebrates

LC50, water flea Daphnia magna, 48 h, lethality: 14.3 mg/L

Toxicity to Aquatic Plants

Ebc50, green alga Pseudokirchneriella subcapitata (formerly Selenastrum capricornutum), inhibiting the growth of biomass, 72 h: 3.2 to 4.9 mg/L.

Data for Component: Ethylbenzene

The product is moderately toxic to aquatic organisms on an acute (LC50/EC50 varies between 1 and 10 mg / L in most sensitive species tested).

Prolonged Toxicity Fish Acute

LC50 Rainbow trout (Oncorhynchus mykiss), static renewal, 96 h: 4.2 mg/L.

Acute Toxicity to Aquatic Invertebrates

EC50, water flea Daphnia magna, static, 24 h, immobilization: 2.2 mg/L.

Toxicity to Aquatic Plants

EC50, green alga Pseudokirchneriella subcapitata (formerly Selenastrum capricornutum) growth inhibition (cell density reduction), 72 h: 3.6 to 4.6 mg/L.

Toxicity to microorganisms

EC50, bacteria, 16 h: > 12 mg / l

Toxicity to organisms living in soil

LC50, Earthworm Eisenia foetida, adult, 2 d: 0.047 mg/cm²

Ecotoxicity Persistence and Degradability

Data for Component: Polymer with 2,2 '- [(1-methylethylidene) bis (4,1-fenilenoximetilen)] bis [oxirane) and 4,4 '- (1-methylethylidene) bisphenol (DGE BPA based polymer).



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By exposure to sunlight is expected photodegradation surface. No appreciable biodegradation is expected.

Data for Component: Xylene

Is expected to readily biodegrade product

Indirect Photodegradation with OH radicals.

Rate Constant	atmospheric half-life	Methodology
6.5 E-12 cm ³ /s	19.7 h	Estimated

Biological Oxygen Demand (BOD):

DBO 5	DBO 10	DBO 20	DBO 28
37.000%	58.000%	72.000%	

Theoretical Oxygen Demand: 3.17 mg / mg.

Data for Component: Ethylbenzene

Material is readily biodegradable. Passes OECD test for ready biodegradability.

Biodegradation Tests (OECD):

Biodegradation	Exposure Time	Method 10-day interval
100%	6 d	OECD 301E Test passed

Indirect Photodegradation with OH radicals.

Rate Constant	atmospheric half-life	Methodology
7.1 E-12 cm ³ /s	55 h	Estimated

Biological Oxygen Demand (BOD):

DBO 5	DBO 10	DBO 20	DBO 28
31.5%	38.5%	45.4%	

Chemical Oxygen Demand (COD): 2.62 mg / mg

Theoretical Oxygen Demand: 3.17 mg / mg

Potential for bioaccumulation

Data for Component: Polymer with 2,2 '- [(1-methylethylidene) bis (4,1-fenilenoximetilen)] bis [oxirane) and 4,4 '- (1-methylethylidene) bisphenol (DGEbPA based polymer)

Bioaccumulation: In the terrestrial environment, material is expected to remain in the ground.

Data for Component: Xylene

Bioaccumulation: Bioconcentration potential is low (BCF <100 or Log Pow <3).

Partition coefficient, n-octanol / water - log Pow: 3.12 Measured

Bioconcentration factor (BCF): 15 - 21; fish; Measured

Data for Component: Ethylbenzene

Bioaccumulation: Bioconcentration potential is low (BCF <100 or Log Pow <3).



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Partition coefficient, n-octanol / water - log Pow: 3.15 Measured
Bioconcentration factor (BCF): 15; fish; Measured

Mobility in soil

Data for Component: Polymer with 2,2 '- [(1-methylethylidene) bis (4.1 - fenilenoximetilen)] bis [oxirane) and 4,4 '- (1-methylethylidene) bisphenol (DGEbPA based polymer)

Mobility in soil: In aquatic environment, material will sink and remain in the sediment.

Data for Component: Xylene

Mobility in soil: The potential for mobility in the soil is moderate (Koc between 150 and 500).

Partition coefficient, soil organic carbon / water (Koc): 443 Estimated

Constant Henry's Law: 7.45 E-03 atm*m³/mol, 77°F Estimated

Data for Component: Ethylbenzene

Mobility in soil: The potential for mobility in soil is low (Koc between 500 and 2000).

Partition coefficient, soil organic carbon / water (Koc): 518 Estimated

Constant Henry's Law: 8.44 E-03 atm*m³/mol, 77°F Measured

XIII. DISPOSAL CONSIDERATIONS

The arrangement shall be in accordance with federal environmental control laws, state and local existents. Incineration is the preferred method.

Provision of products and requirements for disposal:

In accordance with local standards, will be the incineration of hazardous waste.

Contaminated Packaging:

Empty containers with product residues; observe all precautions for the product. Not Hot or cut empty containers with solder electric or gas because they are vapors and gases highly toxic. If empty contaminated containers are recycled or disposed of, the receiver must be informed about potential hazards.

HOT OR NOT CUT THE EMPTY CONTAINERS OR WITH ELECTRIC WELDING GAS TORCH.



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XIV. TRANSPORT INFORMATION

DOT (LAND TRANSPORT)

Shipping name:	Aeropoxy® 50 Jet
Class:	3
UN NUMBER/No. ID:	1263
Packing Group:	III
Risk Label:	3

IATA/ICAO (AIRCRAFT)

Shipping name:	Aeropoxy® 50 Jet
Class:	3
UN NUMBER/No. ID:	1263
Packing Group:	III
Risk Label:	3

IMDG/IMO (SHIPPING)

Shipping name:	Aeropoxy® 50 Jet
Class:	3
UN NUMBER/No. ID:	1263
Packing Group:	III
Risk Label:	3

XV. REGULATORY INFORMATION

Federal Regulations of the United States

Standard classification Hazard Communication OSHA:	Dangerous
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HMIS RATINGS

XVI. OTHER INFORMATION

NFPA RATING

NFPA RATINGS 704M

HEALTH:	1
FLAMMABLE:	3
REACTIVITY:	0
OTHER:	G

HMIS RATING

HEALTH:	2
FLAMMABILITY:	3
PHYSICAL HAZARD:	0

0 = Insignificant
1 = Slight
2 = Moderate
3 = High
4 = Extreme

0 = Insignificant
1 = Slight
2 = Moderate
3 = High
4 = Extreme
* = Chronic Hazard for



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Health.

AND ALL THIS INFORMATION IS FURTHER TECHNICAL ADVICE BASED ON CURRENT KNOWLEDGE AND EXPERIENCE SA DE CV NERVION BELIEVED TO THIS INFORMATION IS ACCURATE TO THE DATE OF PUBLICATION BY THE BEST KNOWLEDGE OF NERVION SA DE CV THE INFORMATION PROVIDED IS INTENDED ONLY AS A GUIDE FOR SAFETY, USE, PROCESSING, STORAGE, TRANSPORTATION, DISPOSAL AND DOWNLOAD AND NOT TO BE CONSIDERED AS A GUARANTEE OR SPECIFICATION OF QUALITY. INFORMATION REFERRED TO IN SPECIFIC DESIGNATED MATERIAL AND IS NOT VALID FOR SUCH MATERIALS USED IN COMBINATION WITH ANY OTHER MATERIALS OR PROCESS UNLESS SPECIFIED IN THIS INFORMATION COME. RESPONSIBILITY AND LIABILITY IS THE CUSTOMER'S inspection and testing RECEIVE ANY PRODUCT. HOWEVER, SA DE CV NERVION ASSUMES NO LIABILITY WHATSOEVER FOR THE USE OF CONFIDENCE DO THIS INFORMATION HDS.

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