

Section 1 - Product and Company Identification

Trade Name: EnduraShield 4104 Resin (All Versions)

Product Code: EnduraShield 4104-000 CL0A-01 Resin

Company:

Wolverine Coatings Corporation
5969 Highway 221
Roebuck, SC 29376
+1 (864) 587-3144

Emergency Contact:

ChemTel 24 Hr. US Emergency Number:
+1 (800) 255-3924
ChemTel 24 Hr. Worldwide Emergency Number:
+1 (813) 248-0585

Product Use: Coatings

Not recommended for: None Identified

Section 2 - Hazards Identification

GHS Ratings:

Flammable Liquid	4	Flash point $\geq 60^{\circ}\text{C}$ (140°F) and $\leq 93^{\circ}\text{C}$ (200°F)
Skin Sensitizer	1	Skin Sensitizer
Aquatic toxicity	C2	Acute toxicity > 1.00 but ≤ 10.0 mg/l and lack of rapid degradability and log Kow ≥ 4 unless BCF < 500 and unless chronic toxicity > 1 mg/l

GHS Hazards

H227	Combustible liquid
H317	May cause an allergic skin reaction
H411	Toxic to aquatic life with long lasting effects

GHS Precautions

P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking
P235	Keep cool
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
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
P321	Specific treatment (see label)
P363	Wash contaminated clothing before reuse
P391	Collect spillage
P302+P352	IF ON SKIN: Wash with soap and water
P333+P313	If skin irritation or a rash occurs: Get medical advice/attention
P370+P378	In case of fire: Use carbon dioxide, alcohol-resistant foam, dry chemical, dry sand, or water fog for extinction
P403+P235	Store in a well ventilated place. Keep cool
P501	Dispose of contents/container in accordance with all local, regional, national, and international regulations.

Signal Word: Warning



Section 3 - Composition / Information on Ingredients

Chemical Name	CAS number	Weight Concentration %
bis(4-(1,2-bis(ethoxycarbonyl)ethy-lamino)-3-methylcyclohexyl)methane	136210-32-7	40.00% - 50.00%
N'-(methylenedicyclohexane-4	136210-30-5	30.00% - 40.00%
Soybean oil acids methyl ester	67784-80-9	1.00% - 5.00%
Distillates (petroleum), hydrotreated light	64742-47-8	1.00% - 5.00%
Triphenyl phosphate	115-86-6	1.00% - 5.00%

Section 4 - First Aid Measures

Inhalation: If affected, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Eye Contact: Immediately flush eyes for at least fifteen minutes with running water. Hold eyelids apart to ensure rinsing of the entire eye surface and lids with water. If eye irritation persists: Get medical advice/attention.

Skin contact: Immediately remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. If a person vomits when lying on his back, place him in the recovery position. Get immediate medical attention.

Section 5 - Fire Fighting Measures

Flash Point: 70 C (158 F) LEL: 1.00 UEL: 6.00

Extinguishing Media: Use carbon dioxide, foam, dry chemical, dry sand, water fog, or limestone powder extinguishing systems.

Unusual Fire and Explosion Hazards: None

Hazardous combustion products: Irritating or toxic substances may be emitted upon burning, combustion or decomposition. See section 10 (Stability and Reactivity) for additional information.

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus.

Fire Equipment: No Data

Section 6 - Accidental Release Measures

Spill And Leak Procedures: Avoid all personal contact. Ensure cleanup personnel wear all appropriate Personal Protective Equipment (PPE), including respiratory protection. Spills should be contained, solidified, and placed in suitable containers for disposal.

Section 7 - Handling and Storage

Handling Precautions: Use good laboratory/workplace procedures. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye and skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Discard shoes contaminated with this product.

Storage Requirements: Keep away from heat, sparks, and open flames. Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Keep container closed when not in use.

Section 8 - Exposure Controls / Personal Protection

Chemical Name / CAS #	OSHA Exposure Limits	ACGIH Exposure Limits	Other Exposure Limits
bis(4-(1,2-bis(ethoxycarbonyl)ethylamino)-3-methylcyclohexyl)methane 136210-32-7	Not Established	Not Established	Not Established
N-(methylenedicyclohexane-4 136210-30-5	Not Established	Not Established	Not Established
Soybean oil acids methyl ester 67784-80-9	Not Established	Not Established	Not Established
Distillates (petroleum), hydrotreated light 64742-47-8	Z-1: TWA- 500 ppm, 2000 mg/m ³ ; PO: TWA- 400 ppm, 1600 mg/m ³	TLV: TWA- 200 mg/m ³	Not Established
Triphenyl phosphate 115-86-6	TWA-3 mg/m ³	TLV: TWA- 3 mg/m ³	Not Established

Ventilation: Good general mechanical ventilation and local exhaust is recommended.

Hygiene: Eye wash must be easily accessible. Wear protective clothing as necessary to prevent contact. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Gloves must be inspected regularly and prior to each use. Replace if necessary.

Personal Protective Equipment: Wear impervious protective gloves. Wear OSHA, NIOSH approved organic vapor respirator if ventilation is inadequate. Wear appropriate protective eyewear such as splash-proof, chemical resistant safety goggles.

Contaminated Gear: Take off all contaminated clothing immediately. Wash contaminated clothing before reuse.

Section 9 - Physical and Chemical Properties

This mixture typically exhibits the following properties under normal circumstances:

Appearance: Liquid	Odor: Not available
Vapor Pressure: 1.4 mmHg	Odor threshold: Not available
Vapor Density: Not available	pH: Not available
Density (g/cm³): 1.03	Melting point: Not available
Freezing point: Not available	Solubility: Not available
Boiling range: Not available	Flash point: 70°C, 158°F
Evaporation rate: Not available	Flammability: Not available
Explosive Limits: Not available	Partition coefficient (n-octanol/water): Not available
Autoignition temperature: Not available	Decomposition temperature: Not available
Viscosity: Not available	Grams VOC less water: Not available

Section 10 - Stability and Reactivity

Stability:
STABLE

Components of this mixture are incompatible with the following materials:

- Strong Oxidizers
- Strong Bases

This mixture is likely to exhibit the following combustion products:

- Carbon Dioxide, Carbon Monoxide
- Oxides of phosphorus
- Smoke
- Hydrocarbons
- Nitrogen Oxides

Hazardous polymerization will not occur.

Section 11 - Toxicological Information

Mixture Toxicity:

Component Toxicity:

- 67784-80-9 Soybean oil acids methyl ester
Oral LD50: 5,000 mg/kg (rat) Dermal LD50: 5,000 mg/kg (rabbit)
- 64742-47-8 Distillates (petroleum), hydrotreated light
Dermal LD50: 3,160 mg/kg (rabbit)

Routes of Entry:

- Inhalation
- Skin Contact
- Eye Contact
- Ingestion

Exposure to this material may affect the following organs:

No Data

The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing):

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
None			No Data

Section 12 - Ecological Information

Component Ecotoxicity:

- Soybean oil acids methyl ester LC50 1000 mg/l fish 96h; EC50 4.65 mg/l water flea 24h
- Distillates (petroleum), hydrotreated light LC50 2.9 mg/l fish 96h; EC50 1.4 mg/l water flea 48h
- Triphenyl phosphate LC50 0.4 mg/l fish 96h; EC50 1 mg/l water flea 48h

Section 13 - Disposal Considerations

Waste disposal Methods: Dispose in accordance with Federal, State and Local regulations.

Section 14 - Transport Information

This material is classified for transport as follows:

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
DOT	Environmentally Hazardous Substance, Liquid, N.O.S., UN 3082 (Contains Coating Solution)		III	9
IATA				
IMDG				

Section 15 - Regulatory Information

Additional regulatory listings, where applicable:

