

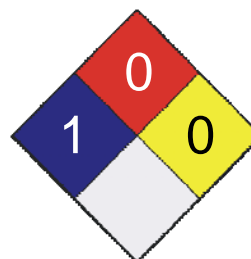
1. Product and Company Identification

Product Name Ecobarrier™ TPO
CAS # Mixture
Product use Automotive, Furniture and Truck Applications
Synonym(s) Ecobarrier 0712, Ecobarrier 0712A, Ecobarrier 0712WX, Ecobarrier 0712B, Ecobarrier 0916, Ecobarrier 0915E, Ecobarrier 0918, Ecobarrier 2412, Ecobarrier 2613, Ecobarrier 2614, Ecobarrier 2618, Ecobarrier 0414, Ecobarrier 0914, Ecobarrier 0712ML, Ecobarrier 0916LX, Ecobarrier 0614, Ecobarrier 1512, Ecobarrier 1512A, Ecobarrier 0918A, Ecobarrier 2012, Ecobarrier 2612

Manufacturer Noble Polymers Inc.
 4855 37th Street SE
 Grand Rapids, MI 49512 US
 Phone: (616) 975-4987
 Emergency Phone: (616) 975-4734 (after hours)
 Safety & Env. Manager: (616) 975-4716

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	* 1
Flammability	0
Physical Hazard	0
Personal Protection	B



2. Hazards Identification

Emergency overview WARNING
 EYE AND SKIN IRRITANT.
 May contain small amounts of crystalline silica and carbon black.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes May cause irritation.

Skin May cause irritation. Contact with molten material may cause thermal burns.

Inhalation Inhalation of vapor/fumes from molten product may cause respiratory tract irritation.

Ingestion Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

Target organs Eyes. Respiratory system. Skin.

Chronic effects Significant lung effects have been observed in animals following exposure to airborne concentrations of Carbon Black of less than 100 mg/m³.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Filler	1317-65-3	<55
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	<30
Residual oils (Petroleum), solvent-dewaxed	64742-62-7	<30
Filler	7727-43-7	<70
Carbonic acid calcium salt (1:1)	471-34-1	<5
Crystalline silica	14808-60-7	<5
Carbon black	1333-86-4	<1

4. First Aid Measures

First aid procedures

Eye contact	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
Skin contact	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Ingestion	Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

Notes to physician

Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties

Not flammable by OSHA criteria.

Extinguishing media

Suitable extinguishing media	Dry chemical. Carbon dioxide. Foam.
Unsuitable extinguishing media	Not available

Protection of firefighters

Specific hazards arising from the chemical	Not available
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Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
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Hazardous combustion products

May include and are not limited to: Oxides of carbon.

Explosion data

Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions

Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.

Methods for containment

Prevent entry into waterways, sewers, basements or confined areas.

Methods for cleaning up

Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage

Handling

Use good industrial hygiene practices in handling this material.

Storage

Keep out of reach of children. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Exposure limits Ingredient(s)	Exposure Limits
Filler (7727-43-7)	ACGIH-TLV TWA: 10 mg/m3 OSHA-PEL TWA: 15 mg/m3
Carbon black	ACGIH-TLV TWA: 3.5 mg/m3 OSHA-PEL TWA: 3.5 mg/m3
Carbonic acid calcium salt (1:1)	ACGIH-TLV TWA: 10 mg/m3 OSHA-PEL Not established
Crystalline silica	ACGIH-TLV TWA: 0.1 mg/m3 OSHA-PEL TWA: 0.1 mg/m3
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH-TLV Not established OSHA-PEL Not established
Filler (1317-65-3)	ACGIH-TLV TWA: 5 mg/m3 OSHA-PEL TWA: 15 mg/m3
Residual oils (Petroleum), solvent-dewaxed	ACGIH-TLV Not established OSHA-PEL Not established

Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Wear safety glasses with side shields.
Hand protection	Temperature resistant gloves shall be used when handling molten material.
Skin and body protection	As required by employer code.
Respiratory protection	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical & Chemical Properties

Appearance	Pellet
Color	black
Form	Solid.
Odor	rubber
Odor threshold	Not available
Physical state	Solid
pH	Not available

Freezing point	Not available
Boiling point	Not applicable
Flash point	Not available
Evaporation rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.2 - 1.8
Octanol/water coefficient	Not available
Solubility (H2O)	Insoluble
Auto-ignition temperature	Not available
VOC (Weight %)	Not available
Viscosity	Not applicable
Percent volatile	Not available

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
Filler (7727-43-7)	Not available
Carbon black	Not available
Carbonic acid calcium salt (1:1)	Not available
Crystalline silica	Not available
Distillates (petroleum), hydrotreated heavy naphthenic	2.18 mg/l/4h rat
Filler (1317-65-3)	Not available
Residual oils (Petroleum), solvent-dewaxed	2 mg/l/4h rat

Component analysis - Oral LD50

Ingredient(s)	LD50
Filler (7727-43-7)	15000 mg/kg rat
Carbon black	8000 mg/kg rat
Carbonic acid calcium salt (1:1)	6450 mg/kg rat
Crystalline silica	500 mg/kg rat
Distillates (petroleum), hydrotreated heavy naphthenic	5000 mg/kg rat
Filler (1317-65-3)	6450 mg/kg rat
Residual oils (Petroleum), solvent-dewaxed	5000 mg/kg rat

Effects of acute exposure

Eye	May cause irritation.
Skin	May cause irritation. Contact with molten material may cause thermal burns.
Inhalation	Inhalation of vapor/fumes from molten product may cause respiratory tract irritation.
Ingestion	Not a normal route of exposure. May cause stomach distress, nausea or vomiting.

Sensitization	Non-hazardous by OSHA criteria.	
Chronic effects	Prolonged or repeated exposure to fine airborne crystalline silica dust may cause severe scarring of the lungs, a disease called silicosis. Early symptoms of silicosis include cough, mucous production and shortness of breath upon exertion. Significant lung effects have been observed in animals following exposure to airborne concentrations of Carbon Black of less than 100 mg/m ³ .	
Carcinogenicity	Hazardous by OSHA criteria. Contains a potential carcinogen.	
IARC - Group 1 (Carcinogenic to Humans)		
Crystalline silica	14808-60-7	Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)
IARC - Group 2B (Possibly Carcinogenic to Humans)		
Carbon black	1333-86-4	Monograph 93 posted, Monograph 65 [1996]
NTP (National Toxicology Program) - Report on Carcinogens - Known Carcinogens		
Crystalline silica	14808-60-7	Known Carcinogen
Mutagenicity	Non-hazardous by OSHA criteria.	
Reproductive effects	Non-hazardous by OSHA criteria.	
Teratogenicity	Non-hazardous by OSHA criteria.	

12. Ecological Information

Ecotoxicity	Components of this product have been identified as having potential environmental concerns.	
Ecotoxicity - Freshwater Fish Species Data		
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	96 Hr LC50 Pimephales promelas: >5000 mg/L
Residual oils (Petroleum), solvent-dewaxed	64742-62-7	96 Hr LC50 Pimephales promelas: >5000 mg/L
Ecotoxicity - Water Flea Data		
Carbon black	1333-86-4	24 Hr EC50 Daphnia magna: >5600 mg/L
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	48 Hr EC50 Daphnia magna: >1000 mg/L
Residual oils (Petroleum), solvent-dewaxed	64742-62-7	48 Hr EC50 Daphnia magna: >1000 mg/L
Environmental effects	Not available	
Aquatic toxicity	Not available	
Persistence / degradability	Not available	
Bioaccumulation / accumulation	Not available	
Partition coefficient	Not available	
Mobility in environmental media	Not available	
Chemical fate information	Not available	

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

Department of Transportation (DOT)	Not regulated as dangerous goods.
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15. Regulatory Information

US Federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. CERCLA/SARA Hazardous Substances - Not applicable.	
Occupational Safety and Health Administration (OSHA)		
29 CFR 1910.1200 hazardous chemical	Yes	

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - Yes
 Fire Hazard - No
 Pressure Hazard - No
 Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

Clean Air Act (CAA) Not available

Clean Water Act (CWA) Not available

Safe Drinking Water Act (SDWA) Not available

Drug Enforcement Agency (DEA) Not available

Food and Drug Administration (FDA) Not available

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

U.S. - California - Proposition 65 - Carcinogens List

Carbon black	1333-86-4	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)
Crystalline silica	14808-60-7	carcinogen, initial date 10/1/88 (airborne particles of respirable size)

U.S. - Illinois - Toxic Air Contaminant Carcinogens

Carbon black	1333-86-4	IARC Group 2B Carcinogen
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U.S. - Illinois - Toxic Air Contaminants

Carbon black	1333-86-4	Present
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U.S. - Massachusetts - Right To Know List

Barium sulfate	7727-43-7	Present
Carbon black	1333-86-4	Present (exempt when encapsulated or if particulates are not present and cannot be substantially generated through use of the product)
Crystalline silica	14808-60-7	Carcinogen; Extraordinarily hazardous
Limestone	1317-65-3	Present

U.S. - Minnesota - Hazardous Substance List

Barium sulfate	7727-43-7	Present
Carbon black	1333-86-4	Carcinogen
Crystalline silica	14808-60-7	Carcinogen
Limestone	1317-65-3	Present

U.S. - Rhode Island - Hazardous Substance List

Carbon black	1333-86-4	Toxic
Crystalline silica	14808-60-7	Toxic (fibrous or dust)
Limestone	1317-65-3	Toxic

16. Other Information

Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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