

Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

Macro Synthetic Polyolefin PP-PE Fibers for Concrete Reinforcement

Synonyms

- Polyolefin Fibers for Concrete Reinforcement; PP/PE Fibers for Concrete Reinforcement
- Applicable brands and styles: Fibermesh® grades 650, 650S; Enduro® 600; Enduro® HPP; Novomesh® 950, Fibermesh®4Roads (FM4R), Enduro 700, Enduro HAR.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s)

- Fibers for Concrete Reinforcement

Use(s) advised against

- Other than intended by manufacturer

1.3 Details of the supplier of the safety data sheet

Manufacturer

- Propex Operating Company, LLC
4019 Industry Drive
Chattanooga, TN 37416
United States
www.propexglobal.com

Telephone (General) • 18006210444

Supplier

- Propex Concrete Systems Ltd.
9 Royal Court
Basil Close Chesterfield S41 7SL
United Kingdom

Telephone (General) • 441246564200

1.4 Emergency telephone number

Manufacturer

- 18004249300 - North America

Manufacturer

- 18005273887 - International

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

2.1 Classification of the substance or mixture

CLP

- Not classified

2.2 Label Elements

CLP

Hazard statements• No label element(s) required

2.3 Other Hazards

CLP

- This material is exempt from CLP/REACH obligations as an article as specified in REACH (1907/2006) and related ECHA guidance.
-

UN GHS

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

2.1 Classification of the substance or mixture

UN GHS

- Not classified

2.2 Label elements

UN GHS

Hazard statements• No label element(s) required

2.3 Other hazards

UN GHS

- Under United Nations Globally Harmonized System for the Classification and Labeling of Hazardous Chemicals (GHS) this product is exempt from regulation as a manufactured article.
-

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

- Not classified

2.2 Label elements

OSHA HCS 2012

Hazard statements• No label element(s) required

2.3 Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200(c) - Hazard Communication Standard), the product(s) listed above are exempt as article(s) under stated normal conditions of use.
-

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Not classified

2.2 Label elements

WHMIS

- No label element(s) required.

2.3 Other hazards

WHMIS

- Under Canadian regulations (Workplace Hazardous Materials Information System (WHMIS) - Hazardous Products Act (HPA), Section 11(1)), these product(s) are exempt and considered manufactured article(s) under stated normal conditions of use.
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Section 3 Composition/Information on Ingredients

3.1 Substances

- Material does not meet the criteria of a substance.

3.2 Mixtures

Composition			
Chemical Name	Identifiers	%	Comments
Polypropylene	CAS:9003-07-0	80% TO 95%	NDA
Polyethylene	CAS:9002-88-4	5% TO 19%	NDA
Lubricants: Fatty acids And/or Esters	NDA	0.1% TO 1%	NDA
Carbon Black	CAS:1333-86-4 EC Number:215-609-9	< 1%	On some pucked products only

Section 4 First Aid Measures

4.1 Description of first aid measures

- Inhalation**
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, move person to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms continue, get medical attention.
- Skin**
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. Wash skin with soap and water. If signs/symptoms develop, get medical attention.
- Eye**
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If contact with material occurs flush eyes with water. If signs/symptoms develop, get medical attention.
- Ingestion**
- First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If signs/symptoms develop, get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Under normal conditions of use, no health effects are expected.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to Physician**
- No specific actions or treatments recommended related to exposure to this material.

Section 5 Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • Carbon dioxide, regular dry chemical, regular foam, water.

Unsuitable Extinguishing Media • No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • Slight fire hazard.

Hazardous Combustion Products • Incomplete burning can produce carbon monoxide and/or carbon dioxide and other harmful products.

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection. Move material from fire area if it can be done without risk.

Section 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

- Personal Precautions**
- No special precautions expected to be necessary if material is used under ordinary conditions and as recommended.
- Emergency Procedures**
- No emergency procedures are expected to be necessary if material is used under ordinary conditions as recommended. Use normal clean up procedures.

6.2 Environmental precautions

- Keep out of drains and water sources.

6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures**
- Contain and remove by mechanical means.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 Handling and Storage

7.1 Precautions for safe handling

- Handling**
- Use good safety and industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

- Storage**
- Store and handle in accordance with all current regulations and standards. Store product in a dry environment to avoid deterioration of packaging.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Australia	Belgium	Czech Republic	Denmark
Carbon Black (1333864)	TWAs	3 mg/m ³ TWA (inhalable fraction)	3 mg/m ³ TWA	3.5 mg/m ³ TWA	2.0 mg/m ³ TWA	3.5 mg/m ³ TWA
Polyethylene (9002884)	TWAs	Not established	Not established	Not established	5 mg/m ³ TWA (dust)	Not established
Polypropylene (9003070)	TWAs	Not established	Not established	Not established	5 mg/m ³ TWA (dust)	Not established
Exposure Limits/Guidelines (Con't)						
	Result	Estonia	Finland	France	Greece	Iceland
Carbon Black (1333864)	TWAs	3 mg/m ³ TWA (dust)	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA [VME]	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA
	STELs	Not established	7 mg/m ³ STEL	Not established	7 mg/m ³ STEL	Not established
	Ceiling s	Not established	Not established	Not established	Not established	7 mg/m ³ Ceiling

Exposure Limits/Guidelines (Con't.)						
	Result	Ireland	Israel	Latvia	Malaysia	New Zealand
Carbon Black (1333864)	TWAs	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	Not established	3.5 mg/m3 TWA	3 mg/m3 TWA
	STELs	7 mg/m3 STEL	Not established	Not established	Not established	Not established
Polyethylene (9002884)	TWAs	Not established	Not established	5 mg/m3 TWA (dust, listed under Polymer dust)	Not established	Not established
Polypropylene (9003070)	TWAs	Not established	Not established	5 mg/m3 TWA (dust, listed under Polymer dust)	Not established	Not established
Exposure Limits/Guidelines (Con't.)						
	Result	NIOSH	Norway	OSHA	Poland	Portugal
Carbon Black (1333864)	TWAs	3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)	3.5 mg/m3 TWA	3.5 mg/m3 TWA	4.0 mg/m3 TWA [NDS] (applies to carbon black containing Benzo(a) pyrene < 35 mg in 1 kg of carbon black, total inhalable dust)	3.5 mg/m3 TWA [VLE-MP]
Exposure Limits/Guidelines (Con't.)						
	Result	Singapore	South Africa	Spain	Sweden	United Kingdom
Carbon Black (1333864)	TWAs	3.5 mg/m3 PEL	3.5 mg/m3 TWA	3.5 mg/m3 TWA [VLA-ED]	3 mg/m3 LLV (total dust)	3.5 mg/m3 TWA
	STELs	Not established	7 mg/m3 STEL	Not established	Not established	7 mg/m3 STEL

Exposure Control Notations

Portugal

'Carbon Black (1333864): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)

South Africa

'Carbon Black (1333864): Carcinogens: (Suspected Human Carcinogen)

Germany DFG

'Carbon Black (1333864): Carcinogens: (Category 3B (could be carcinogenic for man, inhalable fraction))

Exposure Limits Supplemental

Israel

'Carbon Black (1333864): Action Levels: (1.50 mg/m3 AL) | Substances Requiring Environmental - Occu: (Present)

8.2 Exposure controls

Engineering

- Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Measures/Controls

Personal Protective Equipment

Respiratory

- ' No respirator is required under normal conditions of use. If respirable dusts are generated, respirator protection may be needed.

Eye/Face

- ' None required; however, use of eye protection is good industrial practice.

Skin/Body

- ' Protective gloves are recommended for handling bags of fiber or loose fiber.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

LLV = Limit Level Value is the exposure limit for 8 hour work day

STEL = Short Term Exposure Limits are based on 15-minute exposures

National Institute of Occupational Safety and Health

NIOSH = TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Occupational Safety and Health
Administration= OSHA**Section 9 - Physical and Chemical Properties****9.1 Information on Physical and Chemical Properties**

Material Description			
Physical Form	Solid	Appearance/Description	Colorless, light gray, or white fibrous materials packaged in paper bags or pucks with no odor.
Color	Colorless, light gray, or white.	Odor	Odorless
Odor Threshold	NIL		
General Properties			
Boiling Point	No data available	Melting Point/Freezing Point	160 C(320 F)
Decomposition Temperature	No data available	pH	Not relevant
Specific Gravity/Relative Density	= 0.9 Water=1	Water Solubility	Negligible < 0.1 %
Viscosity	Not relevant	Explosive Properties	Not relevant.
Oxidizing Properties:	Not relevant.		
Volatility			
Vapor Pressure	No data available	Vapor Density	No data available
Evaporation Rate	No data available		
Flammability			
Flash Point	383 C(721.4 F)	UEL	No data available
LEL	No data available	Autoignition	404 C(759.2 F)
Flammability (solid, gas)	No data available		
Environmental			
Octanol/Water Partition coefficient	No data available		

9.2 Other Information

- . No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity**10.1 Reactivity**

- . No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- . Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- . Hazardous polymerization will not occur.

10.4 Conditions to avoid

- . None identified.

10.5 Incompatible materials

- . Oxidizing materials.

10.6 Hazardous decomposition products

- Thermal decomposition products of combustion: oxides of carbon.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

GHS Properties	Classification
Respiratory sensitization	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Serious eye damage/Irritation	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Acute toxicity	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Aspiration Hazard	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Carcinogenicity	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Skin corrosion/Irritation	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Skin sensitization	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
STOT-RE	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
STOT-SE	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Toxicity for Reproduction	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant
Germ Cell Mutagenicity	EU/CLP • Not relevant OSHA HCS 2012 • Not relevant UN GHS • Not relevant

Potential Health Effects

Inhalation

Acute (Immediate)

- Under normal conditions of use, no health effects are expected.

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.

Skin

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • Under normal conditions of use, no health effects are expected.

Eye

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • Under normal conditions of use, no health effects are expected.

Ingestion

- Acute (Immediate)** • Under normal conditions of use, no health effects are expected.
- Chronic (Delayed)** • Under normal conditions of use, no health effects are expected.

Carcinogenic Effects

- Due to the form of the product, exposure to the potentially carcinogenic components is not expected.

Carcinogenic Effects		
	CAS	IARC
Carbon	1333864	Group 2B-Possible Carcinogen

11.2 Other information

- The toxicological properties have not been fully investigated. Polypropylene was tested in rats by subcutaneous implantation of discs or powder. Local sarcomas were induced at the site of implantation. Subcutaneous injections are not a normal route of exposure. All inorganic pigments, if present in of this product, are considered to be fully bound within the polymer matrix, and therefore, are not readily available under normal conditions.

Section 12 Ecological Information**12.1 Toxicity**

- Propex has not conducted ecological testing on this material.

12.2 Persistence and degradability

- No data available

12.3 Bioaccumulative potential

- No data available

12.4 Mobility in Soil

- No data available

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- No studies have been found.

Section 13 Disposal Considerations**13.1 Waste treatment methods****Product waste**

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for user • None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code • Not Applicable – Article.

Section 15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • None

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
Polypropylene	9003070	Yes	No	No	No	Yes
Carbon Black	1333864	Yes	No	Yes	Yes	Yes
Polyethylene	9002884	Yes	No	No	No	Yes

Canada

Labor

Canada - WHMIS - Ingredient Disclosure List

• Carbon Black	1333864	D2A (In certain cases, this classification does not apply. For more information, consult the section Substance Specific Issues - Carbon Black, non-respirable on Health Canada's WHMIS Division)
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Uncontrolled product according to WHMIS classification criteria
Canada - WHMIS - Ingredient Disclosure List		
• Carbon Black	1333864	1 %
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

Environment

Canada - CEPA - Priority Substances List

• Carbon Black	1333864	Not Listed
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• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

Environment

U.S. - CAA (Clean Air Act) 1990 Hazardous Air Pollutants

•	Carbon Black	1333864	Not Listed
•	Polyethylene	9002884	Not Listed
•	Polypropylene	9003070	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

United States-California

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

• Carbon Black	1333864	carcinogen, initial date 2/21/03 (airborne, unbound particles of respirable size)
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

U.S. - California Proposition 65 Reproductive Toxicity Male

• Carbon Black	1333864	Not Listed
• Polyethylene	9002884	Not Listed
• Polypropylene	9003070	Not Listed

15.2 Chemical Safety Assessment

- Chemical Safety Assessment is not required.

15.3 Other Information

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

Section 16 Other Information**Revision Date**

- 3/February/2017

Preparation Date

- 16/September/2014

Disclaimer/Statement of Liability

- This publication should not be construed as engineering advice. While information contained in this publication is accurate to the best of our knowledge, Propex does not warrant its accuracy or completeness. The ultimate customer and user of the products should assume sole responsibility for the final determination of the suitability of the information and the products for the contemplated and actual use. The only warranty made by Propex for its products is set forth in our product data sheets for the product, or such other written warranty as may be agreed by Propex and individual customers. Propex specifically disclaims all other warranties express or implied, including without limitation, warranties of merchantability or fitness for a particular purpose, or arising from provision of samples, a course of dealing or usage of trade. NDA=No data available.

Key to abbreviations

