Safety Data Sheet

1. Product and Company Identification

Material Name: 9159	**Postal Code:** N0B 1S0
Material Description: Synthetic Rubber Lining	**Emergency Phone Number:** 1-800-424-9300
Manufacturer: Polycorp Ltd.	**Information Number:** 519-846-2075
Address: 33 York Street Elora, Ontario, Canada	**Website:** www.poly-corp.com

2. Hazard(s) Identification

Classification - Not Classified

The ingredients are bound within the matrix of the polymer to the extent that adverse effects are not expected at ambient temperatures. Hot processing operations produce vapours that may cause eye, skin or respiratory tract irritation. Toxic combustion products may be released under burning conditions

GHS Environmental Hazard No effect to environment unless submerged in water for a significant time. Leaching of eco toxic materials is possible over time, especially if the water is acidic.

Label Elements

Signal Word None

Precautions Very important to provide adequate ventilation for hot processing. If none available use adequate PPE for temperatures over 280F.

Symbol None

Other Hazards A small percentage of the population may have an allergic reaction – if rash persists use PPE when handling.

3. Composition / Information on Ingredients

SDS Name	CAS No.	Concentration % MAX	Exposure Limits	
			LD 50	LC 50
Carbon Black	1333-86-4	23.57	Oral (rat) >8,000 mg/kg; N/A	

4. First Aid Measures

Eye Contact Treat as inert particular matter, flush eyes with water for several minutes.

Skin If allergic rash develops, wash with soap and water and provide PPE. Barrier creams may be helpful. If rash persists, limit associates exposure to this material.

Inhalation Take to fresh air if having effect from process fumes; seek medical help if symptoms persist.

Ingestion Seek professional medical help if ingested.

Special Precautions At high processing temperatures, fumes may be emitted which may cause irritation or chronic effects. Watch for symptoms like coughing, tearing or irritation of eyes or skin. Make sure there is adequate ventilation in all hot

processes.

5. Fire Fighting Measures

Auto Ignition Temperature	>400ºC (750ºF)
Extinguishing Media	Use extinguishing media suitable for Class A fires (ordinary combustibles). Dry powder is not recommended because of lack of cooling capacity. See Sec 10 for information on combustion products.
Special Firefighting Equipment and Procedures	Do not enter confined fire space without proper protective equipment including NIOSH approved self-contained breathing apparatus. Long term cooling of extinguished rubber may be necessary to ensure its out because the rubber insulates the heat within.
Specific Hazards	Smoke from burning compound is very thick and may contain many toxic chemicals. Avoid breathing any smoke.

6. Accidental Release Measures

Steps Taken if Material is Released or Spilled	If material is not exposed is not exposed to high heat, soiled or contaminated, it can be reused indefinitely.
Waste Disposal Method	Dispose of according to state or provincial legislation.
General Advice	Use proper lifting techniques if re-pilling spilled compound. It shift weight quickly so makes it awkward to handle.

7. Handling and Storage

Storage	Store between 15° and 35°C to avoid onset of curing reaction and prevent crystalization of NR
Handling	When handling, you should always wash hands before eating, drinking or smoking.
Special Safeguards	Must have adequate ventilation if heated to high temperatures. This becomes more important as the temperature goes up. Mill processing at 200F generates minimal fumes but more care must be taken with curing fumes over 300F. Injection moulding over 350F can produce reaction products which haven't been determined and may be hazardous.
General Advice	When storing large amounts of cured material some ventilation is recommended to prevent nitrosamine buildup.

8. Exposure Controls / Personal Protection

Respiratory Protection	Not required at ambient temperature. May need respiratory protection if ventilation at high temperature processing is not adequate.
Protective Gloves	Gloves are recommended as a precautionary measure.
Eye Protection	Follow facility guidelines. If adequate ventilation, physical eye protection should not be necessary.
Ventilation	Should have local exhaust to keep processing vapours below permissible levels. The CFP rating will depend on the quantity of material being passed through and the temperature involved. Engineer the system well over expected fume levels as a precaution.
Other	Use of barrier creams on hands may be beneficial for a person that is susceptible to developing skin rashes.
Thermal Hazards	Compound builds heat quickly on mill or in extrusion operations. Wear heat resistant gloves when handling.

9. Physical & Chemical Properties

Boiling Point	Not applicable
Freezing Point	About -40F
Specific Gravity	1.09
Solubility in Water	Insoluble – small parts of the mixture may dissolve in acidic water
Flammability	Very difficult to get burning
Appearance	Black rubbery solid
Auto Ignition Temp.	> 400 C
Viscosity	Solid at room temperature
Odor	Slightly aromatic
Flash Point	Approximately 288 to 343 C
Partition Coefficient	Not applicable

10. Chemical Stability & Reactivity Information

Reactivity	None
Stability	Stable
Hazardous Polymerization	Will not occur
Incompatibility	Not reactive with other substances at ambient temperature. A vulcanization reaction will begin to take place at temperatures exceeding 100°C (212°F)
Conditions to Avoid	None
Hazardous Decomposition	Carbon Monoxide, carbon dioxide, smoke, oxides of nitrogen

11. Toxicological Information

SDS Name	CAS No.	Concentration % MAX	Exposure Limits	
			LD 50	LC 50
Carbon Black	1333-86-4	23.57	Oral (rat) >8,000 mg/kg; N/A	

INFORMATION ON THE LIKELY ROUTES OF EXPOSURE

Inhalation and Eye: Not an issue unless compound is processed at a high temperature which volatilizes some components. This is accentuated as the temperature increases because the volatiles can interact with each other. These components are a very small part of the compound.
Skin: Not an issue unless the worker has an allergic reaction to one of the components - allergic contact dermatitis is rare
Ingestion: Not an issue if a small amount ingested although not advisable. Very difficult to ingest large amounts.

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Inhalation: May have throat and/or nose irritation. More severe exposure may result in dizziness, nausea or headache.
Eye: May have irritation to the eyes, redness, or tearing.
Skin: May have a rash on areas that are exposed to compound contact or the volatiles from hot processing. Rash should go away if removed from exposure.
Ingestion: Not known

DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE

Delayed Effects: none known
Chronic Effects short term: none known
Chronic Effects long term: none known

WHERE SPECIFIC CHEMICAL DATA ARE NOT AVAILABLE

Burning of any rubber compound produces a lot of toxic chemicals which are not readily identifiable. Be aware that the smoke and fumes from burning compound are very hazardous.

INTERACTIVE EFFECTS
None known

NUMERIC MEASURES OF TOXICITY (SUCH AS ACUTE TOXICITY ESTIMATES)
Not able to find lethal dose information on rubber compound as a mixture - expected to be very high.
Oral (rat) LD50 - not determined
Dermal (rabbit) LD50 - not determined

12. Ecological Information

Overview: The compound contains small amounts of chemicals that are hazardous to marine plant life and fish. These chemicals are encapsulated in the insoluble rubber matrix which prevents these materials from reaching the environment at harmful levels. On that basis we consider the compound safe for the environment unless immersed in water for long periods of time. As many of these chemicals are insoluble normally, the hazard is still fairly low unless the water is acidic in which case the leaching is accelerated. It is also accelerated when the compound is ground to a fine powder since the surface area is much greater. As a precaution, do not leave the compound submerged in acidic water for any length of time and not for long periods at pH normal.

Impact	Not determined
Toxicity	Not determined
Persistence and Degradability	Not determined
Bioaccumulation	Not determined
Mobility in Soils	Mobility very low

13. Disposal Considerations

Disposal of Waste Compound	Disposal in landfill recommended if material can't be reused. Check local regulations to make sure it is acceptable in your area.

14. Transport Information

Controls	Not regulated under TDG (Canada) or DOT (US) or IATA or IMDG
Classifications	WHMIS Classification: Not regulated Not defined as Hazardous by 40CFR261

15. Regulatory Information

Canada - On the Domestic Substance List	RETARDER ESEN - This product is on the DSL.; Ti02 ANATASE - All components of this product are included on the DSL.;
Canada - NPRI reportable	RETARDER ESEN - Reportable to NPRI; Ti02 ANATASE - CAS #: 13463-67-7 Titanium (and its components).;
EPA - Toxic Substance Control Act TSCA12(b) - Sec 40 CFR part 707, subpart D	RETARDER ESEN - This product is on the TSCA inventory; Ti02 ANATASE - CAS #: 13463-67-7 All components of this product are included on the TSCA inventory.;

16. Other Information

NFPA Rating Health 1 Fire 1 Reactivity 0

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To the best of Polycorp's knowledge, the above information is true and accurate as of the date of preparation of this safety datasheet.

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