

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

#### Product Identification

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Product Name: SBR 1605, 1605L, 4681  
Product Number: SBR 1605, 1605L, 4681  
Synonyms: Styrene, 1,3 - Butadiene Copolymer, carbon black  
masterbatch, non-extended  
Chemical Name: Styrene, 1,3-Butadiene polymer, Carbon Black Masterbatch,  
Non-extended  
Chemical Family: Synthetic Rubber  
CAS Number: Blend

#### Company Identification

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ISP Elastomers  
P. O. BOX 667  
1215 MAIN ST  
PORT NECHES, TEXAS 77651 USA  
1-800-962-8324 (For product information)  
409-722-8321 (For emergencies)  
1-800-424-9300 or 1-703-527-3887 (CHEMTREC)

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

100.00% SBR 1605, 1605L, 4681

#### CONTAINING:

#### HAZARDOUS AND/OR REGULATED COMPONENTS

Chemical Name	Amount	CAS Number
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CARBON BLACK	26.0 - 33.0 %	1333-86-4

NON-HAZARDOUS COMPONENTS

Chemical Name	Amount	CAS Number
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STYRENE, 1,3-BUTADIENE POLYMER	74.0 - 67.0 %	9003-55-8

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

HAZARDS DISCLOSURE

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

MISCELLANEOUS:

The exposure level for carbon black as a free, airborne powder is PEL/TLV 3.5 mg/m3. The carbon black in this product is bound in the polymer matrix and is not a free, airborne powder.

3. HAZARDS IDENTIFICATION

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***** EMERGENCY OVERVIEW *****
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* May cause skin, eye, or respiratory tract
* irritation.
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HMIS Rating:

Health - 2, Flammability - 1, Reactivity - 0  
Personal Protection Index - B Safety Glasses and Gloves Recommended

NFPA Rating:

Health - 2, Flammability - 1, Reactivity - 0  
Special Hazards - N/A

NFPA/HMIS Definitions: (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

POTENTIAL HEALTH EFFECTS

**EYE:**

No hazards expected in normal industrial use at room temperature.

**SKIN:**

Prolonged or repeated skin contact may cause irritation. Skin contact with molten or heated polymer can cause serious burns.

**INHALATION:**

Irritating vapors may be formed when product is processed at high temperatures.

**INGESTION:**

Ingestion is not considered a potential route of exposure.

**REPRODUCTIVE HAZARDS:**

None known.

**4. FIRST AID MEASURES**

**EYE CONTACT FIRST AID:**

Immediately flush eyes with plenty of water for at least 15 minutes.

**SKIN CONTACT FIRST AID:**

Wash skin with soap and water. For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat.

**INHALATION FIRST AID:**

Although this product is not known to cause respiratory problems, if breathing is difficult, remove to fresh air and provide oxygen.

**INGESTION FIRST AID:**

Ingestion is not considered a potential route of exposure.

**5. FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES**

COC Flash Point: N/A

Autoignition Temperature: N/A

**FLAMMABLE LIMITS IN AIR**

LEL: N/A

UEL: N/A

**EXTINGUISHING MEDIA:**

Use extinguishing media appropriate for the surrounding fire. SBR polymers would be considered 'ordinary combustibles' (NFPA defined Class A). Carbon dioxide is not generally recommended for use on Class A fires as a lack of cooling capacity may result in re-ignition.

**FIRE & EXPLOSION HAZARDS:**

Will burn if involved in a fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**FIRE FIGHTING INSTRUCTIONS:**

Avoid breathing smoke, fumes, and decomposition products. As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**SAFEGUARDS (PERSONNEL):**

Wear appropriate personal protective equipment.

**INITIAL CONTAINMENT:**

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**LARGE SPILLS PROCEDURE:**

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**SMALL SPILLS PROCEDURE:**

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

**7. HANDLING AND STORAGE**

**RECOMMENDED STORAGE TEMPERATURE**

Minimum: 0.0 C (32.0 F)

Maximum: 60 C (140.0 F)

**SHELF LIFE: (in original, sealed containers)**

18 months @ 0.0 C

9 months @ 60 C

**HANDLING (PERSONNEL):**

Avoid breathing vapors from heated material. Avoid prolonged or repeated contact with skin. Wash hands thoroughly after handling.

**HANDLING (PHYSICAL ASPECTS):**

Avoid extreme temperatures. Store in a cool place in original container and protect from sunlight.

**STORAGE PRECAUTIONS:**

Avoid extreme temperatures. Store in a cool place in original container and protect from sunlight.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**ENGINEERING CONTROLS:**

If user operations generate dust, fume, or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. Use local exhaust ventilation with a minimum capture velocity of 100 ft/min(0.5 m/sec) at the point of vapor evolution. Refer to the current edition of 'Industrial Ventilation: A Manual of Recommended Practice,' published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

**EYE / FACE PROTECTION REQUIREMENTS:**

Where contact with this material is likely, eye protection is recommended.

**SKIN PROTECTION REQUIREMENTS:**

Wear protective gloves to minimize skin contamination. Wash hands thoroughly after handling.

**RESPIRATORY PROTECTION REQUIREMENTS:**

Under normal use conditions, with adequate ventilation, no special handling equipment is required.

**EXPOSURE GUIDELINES:**

**CARBON BLACK**

OSHA PEL: 3.5 mg/m<sup>3</sup>

OSHA TWA: 3.5 mg/m<sup>3</sup>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

FORM .....: Solid  
COLOR .....: Black  
ODOR .....: Characteristic  
BOILING POINT .....: ND C  
VAPOR PRESSURE .....: NA mm Hg @ 20 C  
VAPOR DENSITY .....: NA (Air = 1)  
SOLUBILITY IN WATER .....: Insoluble in water, soluble in petroleum  
distillates  
SPECIFIC GRAVITY .....: 1.10 - 1.14 (Water = 1)  
BULK DENSITY .....: NA  
MELTING/FREEZING POINT ...: ND C  
PH .....: ND  
% VOLATILES .....: 1.00 max, as water, % @ 100 C @ 760 mm Hg

## 10. STABILITY AND REACTIVITY

STABILITY:  
Stable.

POLYMERIZATION:  
Hazardous polymerization will not occur.

INCOMPATIBILITY WITH OTHER MATERIALS:  
There are no known materials which are incompatible with this product.

DECOMPOSITION:  
Decomposition will not occur if handled and stored properly. Avoid temperatures above 177C/350F, the onset of polymer decomposition. Decomposition may produce fumes, smoke, oxides of carbon and small amounts of aromatic aliphatic hydrocarbons. Toxic decomposition products may be formed.

## 11. TOXICOLOGICAL INFORMATION

MISCELLANEOUS:  
There is no toxicology information on this material, however, the components possess irritancy potential.

The carbon black in this product is bound in the polymer matrix and is not a free, airborne powder.

The concentration of unreacted 1,3-butadiene is typically 1 ppm, maximum.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.

14. TRANSPORTATION INFORMATION

PRODUCT LABEL .....: 1605, 1605L, 4681  
D.O.T. SHIPPING NAME .....: Crude Synthetic Rubber  
TECHNICAL SHIPPING NAME ...: N/A  
D.O.T. HAZARD CLASS .....: Non-Hazardous  
UN NUMBER .....: N/A  
PRODUCT RQ (LBS) .....: N/A  
D.O.T. LABEL .....: Non Hazardous  
D.O.T. PLACARD .....: N/A  
BULK CLASS .....: N/A  
PACKAGE CLASS .....: N/A

15. REGULATORY INFORMATION

MISCELLANEOUS INFORMATION:

This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA). Not defined or designated as hazardous under Resource Conservation and Recovery Act (RCRA) 40 CFR261. The Toxicity Characteristic Leachate Procedure (TCLP) constituents are below reportable limits.

This material or all of its components are listed (or considered as having been notified) on the European Inventory of Existing Chemical Substances (EINECS). This material or all of its components are listed on the Canadian Domestic Substances List (DSL).

Carbon black is also listed as hazardous material subject to WHMIS. Carbon black is considered a hazardous material within the European Economic Community.

WHMIS Hazard Symbols:  
None

Canadian Disclosure List  
CARBON BLACK (1333-86-4)

EEC Symbols and Indications of Danger:  
Irritant (Xi)

R-Phrases:  
R36/37/38 - Irritating to eyes, respiratory system and skin.

S-Phrases:  
S36/37/39 - Wear suitable protective clothing, gloves and eye / face protection.

16. OTHER INFORMATION

REASON FOR ISSUE ....: New Company Name  
PREPARED BY .....: Joan M. Kord  
APPROVED BY .....: Dale Smith  
TITLE .....: Technical Manager  
APPROVAL DATE .....: July 16, 2003  
SUPERCEDES DATE .....: January 15, 2003  
RTN NUMBER .....: 00000036 (Official Copy)

ADDITIONAL INFORMATION:  
The data in this Material Safety Data Sheet relates only to the specific material designated herein.

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This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of ISP Elastomers. The data on this sheet are related only to the specific material designated herein. ISP Elastomers assumes no legal responsibility for use or reliance upon these data.

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END OF MSDS  
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