



**SOLTEX, INC.**  
3707 FM 1960 West, Suite 560  
Houston, TX 77068  
Phone: 281 587-0900 ▪ Fax: 281 587-1998  
www.soltexinc.com

**Material Safety Data Sheet**  
**ACETYLENE BLACK GRANULAR -03**

**SECTION 1 PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** Acetylene Black Granular – 03 and AB Granular -03

**Synonyms:** Soltex ACE BLACK: CARBON BLACK

**Emergency Phone Number:** CHEMTREC (800) 424-9300

**Other Safety Information:** (281) 587-0900

**SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS**

**COMPONENT CAS NUMBER AMOUNT**  
CARBON BLACK 1333-86-4 100.00 % weight

**Occupational Exposure Limits:**  
Component Limit TWA STEL Ceiling Notation CARBON  
BLACK ACGIH\_TLV 3.5 mg/m3 NA NA NA CARBON  
BLACK OSHA\_PEL 3.5 mg/m3 NA NA NA

**SECTION 3 HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW:**

Odorless black granules.

**MAY CAUSE RESPIRATORY TRACT IRRITATION IF INHALED**

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**IMMEDIATE HEALTH EFFECTS:**

**Eye:** Not expected to cause prolonged or significant eye irritation.

**Skin:** Not expected to be harmful to internal organs if absorbed through the skin. Contact with the skin is not expected to cause prolonged or significant irritation.

**Ingestion:** Not expected to be harmful if swallowed.

**Inhalation:** The dust from this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing.

**DELAYED OR OTHER HEALTH EFFECTS:**

**Cancer:** May cause cancer in laboratory animals, but the available information is inadequate to determine if this material can cause cancer in humans. See Section 11 for additional information. Risk depends on duration and level of exposure.

**SECTION 4 FIRST AID MEASURES**

**Eye:** No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution, remove contact lenses, if worn, and flush eyes with water.

**Skin:** To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

**Ingestion:** If swallowed, do not induce vomiting. Give the person a glass of water or milk to drink and get medical attention. Never give anything by mouth to an unconscious person.

**Inhalation:** Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue. .



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### **SECTION 5 FIRE FIGHTING MEASURES**

The ignition temperature of this material in air is approximately 900C. If ignited, flames may not be visible in the burning powder. Some heat and smoke may be noticeable. Soaking with water may spread the fire due to potential burning powder floating on the water. High pressure fire extinguishing equipment may blow the burning powder into other areas resulting in more fires.

**RECOMMENDED ACTION:** If possible, isolate the burning powder into an open area (preferably outside), monitor, and allow the fire to burn itself out. Gently applying a fine water mist to the area of the fire may be helpful. Stop spraying if water starts to puddle. Eliminating the source of oxygen may also be helpful. DO NOT spray with high pressure fire extinguishers.

**NFPA RATINGS:** Health:1 Flammability: 1 Reactivity: 0

**FLAMMABLE PROPERTIES: Flashpoint:** NDA **Autoignition:** 900°C (1652°F) Flammability (Explosive)

Limits (% by volume in air): Lower: NA Upper:

#### **NA PROTECTION OF FIRE FIGHTERS:**

**Fire Fighting Instructions:** For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus. This material will burn although it is not easily ignited.

**Combustion Products:** Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.

### **SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Spill Management:** Clean up spills immediately, observing precautions in Exposure Controls/Personal Protection section. Sweep up material and place in a disposable container.

**Reporting:** Based on information available to Soltex, Inc., this product is neither listed as a hazardous waste nor does it exhibit any of the characteristics that would cause it to be classified or disposed of as a RCRA hazardous waste.

### **SECTION 7 HANDLING AND STORAGE**

#### **HANDLING**

Technical Measures /Precautions

Provide suitable exhaust in work areas if the product is handled in the open air. Avoid dust suspension in air.

#### **STORAGE**

Technical Measures/Storage Conditions

Protect from damp conditions at normal ambient temperatures. Keep containers tightly sealed.

#### **PACKAGING MATERIALS**

Recommended

Multi-ply paper sacks. Keep product in original containers or within sealed/waterproof hoppers.

#### **OTHER INFORMATION**

A cloud of acetylene black has an explosion index of 0.1 indicating that no explosion was obtained in the course of trials with flames or electric sparks.

### **SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **GENERAL CONSIDERATIONS:**

Consider the potential hazards of this material (see Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.



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**PERSONAL PROTECTIVE EQUIPMENT:** Eye/Face Protection: No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice. Skin Protection: Wear impervious protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing. Suggested materials for protective gloves include: No skin protection is ordinarily required under normal conditions of use.

Respiratory Protection: Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Dusts and Mists

**Occupational Exposure Limits:**

Component Limit TWA STEL Ceiling Notation CARBON  
BLACK ACGIH\_TLV 3.5 mg/m<sup>3</sup> NA NA NA CARBON BLACK  
OSHA\_PEL 3.5 mg/m<sup>3</sup> NA NA NA

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES APPEARANCE AND ODOR**

Odorless black granules. pH: 6.5 - 7.5

VAPOR PRESSURE: NA

VAPOR DENSITY (AIR=1): NA

BOILING POINT: 3500°C (6332°F)

SOLUBILITY: NDA

DENSITY: 1.95 g/cm<sup>3</sup>

**SECTION 10 STABILITY AND REACTIVITY**

**Chemical Stability:** This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. Conditions to Avoid: No Data Available Incompatibility With Other Materials: No data available Hazardous Decomposition

Products: No Data Available Hazardous Polymerization: Hazardous polymerization will not occur.

**SECTION 11 TOXICOLOGICAL INFORMATION IMMEDIATE HEALTH EFFECTS**

Acute Oral Toxicity: The oral LD<sub>50</sub> is undetermined.

Acute Dermal Toxicity: The dermal LD<sub>50</sub> is undetermined.

Eye Irritation: This material is not expected to be irritating to the eyes.

Skin Irritation: This material is not expected to be irritating to the skin.

Respiratory Tract Irritation: This material is a mild irritant to the respiratory tract.

**ADDITIONAL TOXICOLOGY INFORMATION:**

The International Agency for Research on Cancer (IARC) has classified carbon black as a Group 2B carcinogen (possibly carcinogenic to humans) based on sufficient evidence in animals and inadequate evidence in humans. Carbon black has not been listed as a carcinogen by the National Toxicology Program the Occupational Safety and Health Administration. Acetylene black, a high purity carbon black, is made from the thermal decomposition of acetylene gas. It is a pure form of carbon containing less than 0.2 ppm polycyclic aromatic hydrocarbons (PAHs). Therefore, acetylene black is not expected to directly interact with DNA to present a cancer risk by skin exposure or by inhalation. However, chronic inflammation, lung fibrosis, and lung tumors have been observed in rats in studies in which rats inhaled carbon black for a lifetime at concentrations that overwhelmed the lung particle clearance mechanisms and caused the carbon black to accumulate in the lung. Results of these studies indicate that tumors were caused by the physical effect of overloading the lungs with particles and suggest that exposures below the exposure limit would not cause adverse health effects. Studies of workers in the carbon black industry indicate that elevated rates of lung cancer have not been associated with occupational exposures to carbon black. Studies in Eastern Europe of workers heavily exposed to carbon black reported respiratory diseases including bronchitis, fibrosis, pneumoconiosis, emphysema, and rhinitis, but not cancer; however, these studies are of questionable validity, due to inadequate study design and methodology, lack of appropriate controls for cigarette smoking, and confounding with concurrent exposures to other substances. Studies of workers in the carbon black production industries of North America and Western Europe show that pulmonary effects of exposure to carbon black are limited to slight radiological changes in the lung, chronic bronchitis, and slight reduction in lung function. Tumors



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induced in rat lungs by carbon black, as well as other biologically inert particles, under conditions of overload may be rat-specific effects as they are not seen in mice or hamsters tested under similar conditions or in studies of carbon black workers. We believe that the data presently available for carbon black do not support a significantly increased risk of cancer or other adverse health effects for workers when precautions outlined in this document are followed.

#### **SECTION 12 ECOLOGICAL INFORMATION**

##### **ECOTOXICITY:**

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

##### **ENVIRONMENTAL FATE:**

This material is not expected to present an environmental problem. physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

#### **SECTION 13 DISPOSAL CONSIDERATIONS**

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

#### **SECTION 14 TRANSPORT INFORMATION**

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

##### **US DOT**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

##### **ICAO / IATA**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

##### **IMO / IMDG**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

##### **RID / ADR**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

#### **SECTION 15 REGULATORY INFORMATION SARA 311/312 CATEGORIES:** 1. Immediate

(Acute) Health Effects: YES

1. 2. Delayed (Chronic) Health Effects: YES

2. 3. Fire Hazard: NO

3. 4. Sudden Release of Pressure Hazard: NO

4. 5. Reactivity Hazard: NO

#### **REGULATORY LISTS SEARCHED:**

04A = IARC Group 1 12 = TSCA Section 8(a) PAIR 21 = TSCA Section 5(a) 04B = IARC Group 2A 13 = TSCA Section 8(d) 25 = CAA Section 112 HAPs 04C = IARC Group 2B 15 = SARA Section 313 26 = CWA Section 311 05 = NTP Carcinogen 16 = CA Proposition 65 28 = CWA Section 307 06 = OSHA Carcinogen 17 = MA RTK 30 = RCRA Waste P-List 09 = TSCA 12(b) 18 = NJ RTK 31 = RCRA Waste U-List 10 = TSCA Section 4 19 = DOT Marine Pollutant 32 = RCRA Appendix VIII 11 = TSCA Section 8(a) CAIR 20 = PA RTK 33 = MN Hazardous Substance. The following components of this material are found on the regulatory lists indicated. CARBON BLACK 04C, 17, 18, 20, 33



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**CHEMICAL INVENTORY LISTINGS:**

AUSTRALIA: All the components of this material are listed on the Australian Inventory of Chemical Substances (AICS). CANADA: All the components of this material are on the Canadian Domestic Substances List (DSL). PEOPLE'S REPUBLIC OF CHINA: All the components of this product are listed on the draft Inventory of Existing Chemical Substances in China. EUROPEAN UNION: All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC. JAPAN: All the components of this product are on the Existing & New Chemical Substances (ENCS) inventory in Japan, or have an exemption from listing. KOREA: All the components of this product are on the Existing Chemicals List (ECL) in Korea. PHILIPPINES: All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS). UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

**SECTION 16 OTHER INFORMATION NFPA RATINGS**

Health: 1 Flammability: 1 Reactivity: 0 (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, \*- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the

**REVISION STATEMENT:** This revision updates the transportation information, please review section 14.  
**ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:** TLV -Threshold Limit Value TWA - Time Weighted Average STEL -Short-term Exposure Limit PEL - Permissible Exposure Limit ACGIH -American Conference of Government Industrial Hygienists OSHA - Occupational Safety & Health NIOSH -National Institute of Safety & Health NFPA - National Fire Protection Agency WHMIS -Workplace Hazardous Materials Information System IRAC - Intl. Agency for Research on Cancer EINECS -European Inventory of existing Commercial Chemical Sales RCRA - Resource Conservation Recovery Act SARA -Superfund Amendments and Reauthorization Act. TSCA - Toxic Substance Control Act EC50 - Effective Dose LC50 - Lethal Concentration LD50 -Lethal Dose CAS - Chemical Abstract Service Number NDA -No Data Available NA - Not Applicable <= -Less Than or Equal To >= - Greater Than or Equal To CNS -Central Nervous System  
Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by EHS Product Stewardship Group, Soltex, Inc., Houston, TX 77068

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

REVISED 07/21/08