

Product name: Carbo (TM) 1289 silane

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Carbo (TM) 1289 silane

Chemical name: Silane Treated Carbon Black

Supplier: Crompton Corporation
One American Lane
Greenwich, CT 06831-2559, USAEmergency telephone number: CHEMTREC (24 hours) 800-424-9300
Crompton Corporation Emergency Response (24 hours)
800-809-9998
Crompton Corporation Emergency Response (24 hours)
304-926-8418

For MSDS, Product Safety, or regulatory inquiries, call: Mr. Dana Dalrymple 304-652-8446 / (fax) 304-652-1478

Customer Service: 800-523-5862

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS#	CONCENTRATION
Carbon Black	1333-86-4	50.0 %
Organofunctional Silane	Trade secret	50.0 %
Ethanol	64-17-5	< 0.1 %

Note(s): Additional ethanol may be formed by reaction with moisture.
See Section 15 for chemicals appearing on Federal or State Right-To-Know lists.**3. HAZARDS IDENTIFICATION**

APPEARANCE

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Physical state	Solid
Color	Black
Odor	Sulfur

EMERGENCY OVERVIEW

CAUTION!

COMBUSTIBLE.

POTENTIAL HEALTH EFFECTS**Swallowing****Acute effects**

May cause the following effects:

- dizziness, faintness, drowsiness, decreased awareness and responsiveness, euphoria, abdominal discomfort, nausea, vomiting, staggering gait, lack of coordination and coma

Effects of repeated overexposure

Long-term repeated oral exposure to ethanol may result in the development of progressive liver injury with fibrosis.

Skin absorption**Acute effects**

No evidence of harmful effects from available information.

Inhalation**Acute effects**

May cause irritation of the respiratory tract.

May cause the following effects:

- nasal discomfort and discharge
- chest pain
- coughing

Skin contact**Acute effects**

May cause minor irritation.

May cause the following effects:

- itching
- slight local redness

Effects of repeated overexposure

Skin contact may cause:

- a dermatitis

Prolonged and/or repeated contact may result in:

- defatting of the skin

Eye contact**Acute effects**

May cause mild discomfort.

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May cause the following effects:

- excess redness of the conjunctivae

Medical conditions aggravated by overexposure

Repeated exposure to ethanol may aggravate liver injury produced from other causes.

Other effects of overexposure

Repeated ingestion of ethanol by pregnant mothers has been shown to adversely affect the central nervous system of the fetus, producing a collection of effects which together constitute the fetal alcohol syndrome. These include mental and physical retardation, disturbances of learning, motor and language deficiencies, behavioral disorders, and small size head.

POTENTIAL ENVIRONMENTAL EFFECTS

All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this Safety Data Sheet.

4. FIRST AID MEASURES

Swallowing

If patient is fully conscious, give two glasses of water. Induce vomiting. Obtain medical attention.

Skin

Wash skin with soap and water.

Inhalation

No emergency care anticipated.

Eye contact

Immediately flush eyes with water and continue washing for several minutes. Obtain medical attention if discomfort persists.

Notes to physician

This product contains ethanol. Symptoms vary with the alcohol level of the blood. Mild alcohol intoxication occurs at blood levels between 0.05%-0.15% and approximately 25% of individuals will show signs of intoxication at these levels. Above 0.15% the person is definitely under the influence of ethanol and 50%-95% of individuals at this level are clinically intoxicated. Severe poisoning occurs when the blood ethanol level is 0.3%-0.5%. Above 0.5% the individual will be comatose and death can occur. The unabsorbed ethanol should be removed by gastric lavage after intubating the patient to prevent aspiration. Avoid the use of depressant drugs or the excessive administration of fluids. In the presence of hypoglycemia, administer 5%-10% glucose intravenously, plus thiamine 100 mg intramuscularly. Hemodialysis is indicated if the ethanol concentration in the blood is above 5 mg/ml. Naloxone may be useful to reverse clinical alcoholic coma and 0.4-1.2 mg intravenously may arouse ethanol-intoxicated patients.

5. FIRE-FIGHTING MEASURES

Flash point: 88 °C (190 °F)

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Flammable limits

Lower limit: Not available

Upper limit: Not available

Special fire fighting procedures

None.

Special protective equipment for firefighters

Use self-contained breathing apparatus when fighting fires in enclosed areas.

Extinguishing media

Suitable: Large fires:
- alcohol-type foam or universal-type foams
Small fires:
- CO2
- dry chemical

Unsuitable: None.

Unusual fire and explosion hazards

None

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective equipment.

Environmental precautions

Prevent runoff.

Methods for cleaning up

Cover with absorbent or contain.

Collect for disposal.

Observe government regulations.

7. HANDLING AND STORAGE

STORAGE**Storage requirements**

Keep away from heat and flame.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION**Respiratory protection**

None expected to be needed.

Hand protection / protective gloves

Recommended order of use:

4H

Butyl

Neoprene

Nitrile (NBR)

PVC-coated

Eye protection

Safety glasses.

Other protective equipment

Chemical apron

Eye bath

Safety shower

ENGINEERING CONTROLS**Ventilation**

General (mechanical) room ventilation is expected to be satisfactory where this product is stored and handled in closed equipment.

Special, local ventilation is needed at points where vapors can be expected to escape to the workplace air.

A vent scrubber should be used to minimize odor.

EXPOSURE LIMITS

<u>Component</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Carbon Black	TWA, OSHA	3.5 mg/m ³	
	TWA, ACGIH	3.5 mg/m ³	
<u>Component</u>	<u>Type</u>	<u>Value</u>	<u>Remark</u>
Ethanol	TWA, OSHA	1,000.0 ppm	
	TWA, ACGIH	1,000.0 ppm	

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Product name: Carbo (TM) 1289 silane

Physical state	Solid
Color	Black
Odor	Sulfur

OTHER PROPERTIES

Boiling point	Not applicable
Melting point	Not applicable
pH	Not available
Specific gravity (H ₂ O=1)	1.8000 at 25 °C (1,013 hPa) (estimated)
Vapor pressure	Not applicable
Vapor density (air=1)	Not applicable
Solubility in water	Reacts slowly
Evaporation rate (Butyl Acetate=1)	Not available
Flash point	88 °C (190 °F) Method: Pensky-Martens closed cup ASTM D 93 (estimated)
Upper explosion limits	Not available
Lower explosion limits	Not available
Percent volatiles	Not determined
Molecular weight	Proprietary

10. STABILITY AND REACTIVITY

Stability: Stable.

Stability - Conditions to avoid

Do not store at temperatures:
>60 °C (140 °F)

Incompatible materials

Acids.

Bases.

Reacts with water or moisture to form:

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Ethanol.

Hazardous combustion products

Burning can produce the following combustion products:

Oxides of carbon.

Oxides of sulfur.

Oxides of silicon.

Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant.

Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

Hazardous polymerization: Will not occur.**Hazardous polymerization - Conditions to avoid**

None known.

11. TOXICOLOGICAL INFORMATION

<u>Component toxicology</u> Acute toxicity - Swallowing:	LD50 - Rats Result: > 5,000 mg/kg Remark: low order of toxicity
<u>Component toxicology</u> Acute toxicity - Skin absorption:	LD50 - Rats Result: > 2,000 mg/kg Remark: low order of toxicity
<u>Component toxicology</u> Skin irritation - Skin contact:	Species: Rabbit Result: Slight irritation
<u>Component toxicology</u> Eye irritation - Eye contact:	Species: Rabbit Result: Mild irritation

SIGNIFICANT DATA WITH POSSIBLE RELEVANCE TO HUMAN HEALTH

The following information is applicable to a component of this material.

This material was negative in a Salmonella Typhimurium/ Escherichia coli mutagenicity assay.

The following information is based on ethanol:

The International Agency for Research on Cancer (IARC) has determined that the consumption of alcoholic beverages is causally related to the occurrence of malignant tumors of the oral cavity, pharynx, larynx, esophagus and liver in humans. The carcinogenic response attributed to drinking alcoholic beverages has not been verified in studies with laboratory animals. Established uses of denatured ethanol and non-beverage uses of pure ethanol are not considered to pose any significant cancer hazard.



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12. ECOLOGICAL INFORMATION

All available ecological data have been taken into account for the development of the hazard and precautionary information contained in this Safety Data Sheet.

13. DISPOSAL CONSIDERATIONS

General: Incinerate in a furnace where permitted under appropriate Federal, State, and local regulations.

14. TRANSPORT INFORMATION

DOT Classification

This product is not regulated by DOT.

IMDG Classification

This product is not regulated by IMDG.

ICAO Classification

This product is not regulated by ICAO.

15. REGULATORY INFORMATION

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.

Components present in this product at a level which could require reporting under the statute are:

**** NONE ****

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) in 40CFR355 (used for SARA 302 and 304).

Components present in this product at a level which could require reporting under the statute are:

**** NONE ****

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:



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**** NONE ****

Massachusetts Right-To-Know Substance List (MSL)—Hazardous Substances and Extraordinarily Hazardous Substances on the MSL must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Carbon Black	1333-86-4	50.00

Pennsylvania Right-To-Know Hazardous Substance List—Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

Chemical name	CAS#	Max weight %
Carbon Black	1333-86-4	50.00

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

Chemical name	CAS#	New Jersey TS Number
Organofunctional Silane	Trade secret	NJ Reg# 26175-23246A, -23246B, -23246C, -23246D
Carbon Black	1333-86-4	

EPA Hazard Categories (SARA 311, 312): Fire Hazard

California Proposition 65

This product contains no levels of listed substances, which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute.

California SCAQMD Rule 443.1 VOC's

Volatile Organic Components (VOC's) = Substances with vapor pressure of => 0.5 mmHg at 104°C (219.2°F).

****NOT DETERMINED****

CHEMICAL INVENTORY

United States: The components of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

RECOMMENDED USES AND RESTRICTIONS

Please consult the product and/or application information bulletins for this product.

HMIS RATING

Health: 1	Flammability: 2	Reactivity: 1	PPI: X
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LEGEND

STP	Standard temperature and pressure
W/W	Weight/Weight



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0 (HMIS)	Minimal hazard
1 (HMIS)	Slight hazard
2 (HMIS)	Moderate hazard
3 (HMIS)	Serious hazard
4 (HMIS)	Severe hazard
X (HMIS)	Personal protection rating to be supplied by user depending on use conditions

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The opinions expressed herein are those of qualified experts within Crompton Corporation. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Crompton Corporation, it is the user's obligation to determine the conditions of safe use of the products.