

# SPI Supplies Division

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Manufacturer's CAGE: 1P573

# Safety Data Sheet

Date Effective: March 14, 2013

SPI # 05065-AB

Carbon Paste

## Section 1: Identification

Chemical Name/Synonyms.....Mixture

Chemical family.....Graphite and carbon particles in solvents

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-527-3887

Worldwide FAX: 1-(703)-741-6090

Toll-free phone: 1-(800)-424-9300 USA only

Product or Trade Name.....SPI # 05065-AB Carbon Paste

CAS #'s.....7782-42-5, 67-63-0, 107-98-2, 71-36-3

Chemical Formula.....Mixture

Conditions of Use: To be used in a laboratory setting for preparation of porous samples during x-ray analysis.

Hazardous Material Information System USA

Health.....1

Fire Hazard.....3

Physical Hazard.....1

Personal Protection.....

NFPA Rating (estimated)

Health.....1

Flammability.....3

Reactivity.....1

Personal Protection.....

### GHS Classification

Flammable liquid: Category 2

Eye irritant: Category 2

Skin irritant: Category 2

STOT SE (CNS): Category 3

Acute oral toxicity: Category 4

### Hazard Symbol(s)



**Signal Word:** Danger

**Hazard Statement(s)**

H225: Highly flammable liquid and vapour  
H302: Harmful if swallowed  
H315: Causes skin irritation  
H319: Causes serious eye irritation  
H335: May cause respiratory irritation  
H336: May cause drowsiness or dizziness

**Precautionary Statement(s)**

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P233: Keep container tightly closed  
P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
P270: Do not eat, drink or smoke when using this product  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
P330: Rinse mouth  
P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P363: Wash contaminated clothing before reuse  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
P313: Get medical advice/attention  
P403+235: Store in a well ventilated place. Keep cool

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**Section 2: Composition**

Component	CAS #	Percentage	EC #
Carbon	7782-42-5	15-25	231-955-3
Isopropyl alcohol	67-63-0	40-55	200-661-7
Propylene glycol methyl ether	107-98-2	5-15	203-539-1
N-butyl alcohol	71-36-3	5-15	200-751-6

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**Section 3: Hazard Identification**

**Emergency overview:** Over exposure can cause irritation eyes, nose, throat; headache, dizziness, drowsiness; corneal inflammation, blurred vision, lacrimation; dermatitis; vomiting, diarrhea, and central nervous system depression,

**Routes of Entry:** Skin and eye contact, Ingestion, Inhalation

**Physical state:** Paste

**Color:** Black

**Odor:** Sharp

**Target Organs:** Skin, Eyes, Central Nervous System, Gastrointestinal, Respiratory

**Potential health effects**

**Eyes:** May cause irritation, burning sensation and blurred vision

**Skin:** May cause reddening and swelling

**Inhalation:** Vapors or mists can cause headaches, nausea, dizziness and respiratory irritation

**Ingestion:** May cause gastrointestinal irritation, nausea vomiting and diarrhea

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## Section 4: First Aid Measures

**Eye contact:** Immediately flush with large amounts of water and continue for at least 15 minutes. Call a physician

**Skin:** Remove contaminated clothing and wash skin with soap and water

**Inhalation:** In case of exposure to high concentrations of vapor or mist, remove person to fresh air. If breathing is difficult, give oxygen and call a Physician. If breathing has stopped, apply artificial respiration and call a Physician.

**Ingestion:** If appreciable quantities are swallowed, seek medical attention

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## Section 5: Fire Fighting Measures

**Flash point:** >54° F (22.2°C) ...Method: Setaflash (IPA-lowest flashing component)

**Explosive limits: (%volume in air)**

Lower: 1.4 %

Upper: 12.0 %

**Extinguishing media:** Use carbon dioxide or dry chemical for small fires; aqueous foam or water for large fires.

**Special fire fighting procedures:** Remove all ignition sources. Wear self contained breathing apparatus and complete personal protective equipment when entering confined areas where potential to exposure to vapors or products or combustion exists.

**Unusual fire and explosion hazards:** Closed containers may rupture due to build-up of pressure when exposed to extreme heat.

**Hazardous decomposition materials:** Carbon monoxide, carbon dioxide, smoke, and unidentified organic compounds.

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## Section 6: Accidental Release Measures

**Personal precautions:** Wear protective clothing as described in section 8.

**Environmental precautions:** Prevent material from entering sewers, watercourses, or ground.

**Spills:** Remove all sources of ignition (flame, hot surfaces and any producers or electrical, static or frictional sparks). Wear appropriate protective clothing as described in section 8. Ventilate are and try to contain spill for disposal by scooping up liquids and absorbing with sand or other approved absorbent materials and dispose in accordance with all local, state and federal laws.

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## Section 7: Handling and Storage

**Handling:** Wear appropriate protective clothing, Do not breath vapor or get liquid in eyes, on skin or clothing.

**Storage:** Store containers tightly closed in cool, dry, well ventilated place. Overheating may cause container to rupture. Use explosion proof electrical equipment and keep away from sources of ignition. Containers of this material may be hazardous when emptied due to solid or vapor residue. All hazard precautions given in this data sheet must be observed for empty containers.

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## Section 8: Exposure Controls and Personal Protection

### Occupational exposure limits:

Component	CAS #	OSHA PEL	ACGIH TLV TWA	NOISH REL TWA
Carbon	7782-42-5	15 mppcf	2 mg/m <sup>3</sup>	2.5 mg/m <sup>3</sup>
Isopropyl alcohol	67-63-0	400 ppm	983 mg/m <sup>3</sup>	400 ppm
Propylene glycol methyl ether	107-98-2	100 ppm	369 mg/m <sup>3</sup>	100 ppm
N-butyl alcohol	71-36-3	100	61 mg/m <sup>3</sup>	50 ppm

**Control measures:** Provide adequate cross air ventilation to keep dust and/or vapor levels below PEL and TLV levels

### Personal protection

**Eyes:** Splash proof safety goggles

**Skin and body:** Impervious gloves (rubber or neoprene) to avoid direct skin contact

**Respiratory:** If PEL and TLV levels are exceeded a NESA/NIOSH self-contained breathing apparatus or vapor cartridge respirator must be worn.

**Other protective equipment:** Eyewash station and emergency shower

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## Section 9: Physical and Chemical Properties

**Physical state:** Paste

**Color:** Black

**Odor:** Sharp

**Odor threshold:** Not available

**pH:** Not available

**Melting point/Freezing point:** Not available

**Boiling range:** 180° F-244° F

**Flash point:** >54° F

**Vapor density:** Not available

**Vapor pressure:** <4.0 mm @ 20° C

**Solubility in water:** Partial

**% Volatile by weight:** < 65.0

**Specific gravity:** 0.9

**Evaporation rate:** Faster (relative to n-butyl acetate)

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## Section 10: Stability and Reactivity

**Stability:** Stable

**Conditions to avoid:** Storage about 100° F, loss of polymerization inhibitor, contamination with incompatibility materials

**Incompatibility (materials to avoid):** Strong oxidizing agents, strong acids, strong bases, caustics, amines and alkalis

**Hazardous decomposition products:** Carbon monoxide, carbon dioxide, smoke, and unidentified organic compounds

**Hazardous polymerization:** May not occur

**Polymerization conditions to avoid:** Polymerization initiators including peroxides, strong oxidizing agents, or strong bases. Contamination with strong acids. Amines, or mercaptans can cause polymerization.

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## Section 11: Toxicological Information

### RTECS:

Component	CAS #	RTECS #
Carbon	7782-42-5	MD9659600
Isopropyl alcohol	67-63-0	NT8050000
Propylene glycol methyl ether	107-98-2	UB7700000
N-butyl alcohol	71-36-3	EO1400000

### Acute toxicity data:

Component	LD50 (rat) oral	LD50 (rabbit) dermal	LC50 (rat) inhalation
Carbon	Not available	Not available	Not available
Isopropyl Alcohol	5.0 g/kg	12.8 g/kg	> 18,000 ppm
Propylene glycol methyl ether	3.7 g/kg	13.0 g/kg	> 15,000 ppm
N-butyl alcohol	0.8 g/kg	3.4 g/kg	> 3,000 ppm

**Carcinogenicity:** No ingredients of this product are designated by IARC, NTP, or ACGIH as potential carcinogens

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## Section 12: Ecological Information

**Ecotoxicity:** Not available

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## Section 13: Disposal Considerations

Dispose in accordance with all local, state and federal regulations.

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## Section 14: Transport Information

Shipping information:

**Shipping name:** Paint Related Material

**Hazard Class:** 3

**UN/NA Class:** UN1263

**Label:** Flammable liquid

**Packing Group:** III

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## Section 15: Regulatory Information

**TSCA Inventory:** All ingredients in this product appear on the TSCA inventory

**SARA 302:** No components

**SARA 304:** No components

**SARA 311/312 Hazards:** Fire hazard, Acute health hazard, Chronic health hazard

**SARA 313:**

Component	CAS #
Isopropyl alcohol	67-63-0
N-butyl alcohol	71-36-3

**CERCLA:** N-butyl alcohol (71-36-3) >5000 lbs.

**Massachusetts Right To Know Components:**

Component	CAS #
Carbon	7782-42-5
Isopropyl alcohol	67-63-0
Propylene glycol methyl ether	107-98-2
N-butyl alcohol	71-36-3

**Pennsylvania Right to Know Components:**

Component	CAS #
Carbon	7782-42-5
Isopropyl alcohol	67-63-0
Propylene glycol methyl ether	107-98-2
N-butyl alcohol	71-36-3

**New Jersey Right To Know Components:**

Component	CAS #
Carbon	7782-42-5
Isopropyl alcohol	67-63-0
Propylene glycol methyl ether	107-98-2
N-butyl alcohol	71-36-3

**California Prop. 65:** No components

**Canadian DSL:**

Component	CAS #	DSL
Carbon	7782-42-5	Listed
Isopropyl alcohol	67-63-0	Listed
Propylene glycol methyl ether	107-98-2	Listed
N-butyl alcohol	71-36-3	Listed

**Canadian WHMIS Classification:**

Component	CAS #	WHMIS Classification
Carbon	7782-42-5	None
Isopropyl alcohol	67-63-0	B2 Flammable and combustible material D2B Poisonous and infectious material
Propylene glycol methyl ether	107-98-2	B2 Flammable and combustible material
N-butyl alcohol	71-36-3	B2 Flammable and combustible material D2B Poisonous and infectious material

## European Commission

### Hazard Symbols:

[F] Highly flammable

[Xi] Irritant

[Xn] Harmful

### Risk Phrases:

R11: Highly flammable [F]

R22: Harmful if swallowed [Xn]

R36/37/38: Irritating to eyes, respiratory system and skin [Xi]

### Safety Phrases:

S2: Keep out of the reach of children

S7/9: Keep container tightly closed and in a well ventilated place

S13: Keep away from food, drink, and animal foodstuffs

S16: Keep away from sources of ignition- No smoking

S24/25: Avoid contact with skin and eyes

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S37/39: Wear suitable gloves and eye/face protection

S46: If swallowed seek medical advice immediately and show this container or label

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## Section 16: Other Information

### Disclaimer of Liability:

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.

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