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Manufacturer's CAGE: 1P573

Safety Data Sheet

Date Effective: March 9, 2016

SPI #05055-AB Leit-C CCC Carbon Cement

Section 1.1: Identification

Chemical Name/Synonyms..... Carbon cement

Product or Trade Name..... Leit-C CCC Carbon Cement

CAS #'s..... 7782-42-5; 1330-20-7; 78-93-3; 67-64-1; 108-65-6; 241-78-6

Chemical Formula..... Graphite in solvent mixture

Section 1.2: Relevant Uses/Restrictions

Laboratory Chemical

Section 1.3: Supplier of the Safety Data Sheet

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Section 1.4: Emergency telephone number

Emergencies
Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...
Worldwide phone: 1-(703)-741-5970
Toll-free phone: 1-(800)-424-9300 USA + Canada only

Section 2: Hazard Identification

2.1 Classification of the substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity – Category 4
Skin irritation – Category 2
Eye irritation – Category 2A

2.2 Label elements

Pictogram


Signal Word: Danger

Hazard statements:

H225: Highly flammable liquid and vapor
H302: Harmful if swallowed
H332: Harmful if inhaled
H315: Causes skin irritation
H319: Causes serious eye irritation
H336: May cause drowsiness or dizziness

Precautionary Statements:

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking
P240: Ground/bond container and receiving equipment
P241: Use explosion-proof electrical/ventilating/light/…/equipment
P242: Use only non-sparking tools
P243: Take precautionary measures against static discharge
P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P264: Wash thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only outdoors or in a well-ventilated area
P280: Wear protective gloves/protective clothing/eye protection/face protection
P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P362: Take off contaminated clothing and wash before reuse
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P330: Rinse mouth
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P332+313: If skin irritation occurs: Get medical advice/attention
P337+313: If eye irritation persists get medical advice/attention
P370+378: In case of fire: Use CO2, powder, or water spray for extinction
P403+233+235: Store in a well ventilated place. Keep container tightly closed. Keep cool.

2.3 Other Hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable
vPvB: Not applicable

Hazardous Material Information System USA

Health..... 1
Fire Hazard..... 3
Reactivity..... 0
Personal Protection.....

NFPA Rating (estimated)

Health..... 1
Flammability..... 3
Reactivity..... 0

Section 3: Composition

3.1 Substances:

Chemical characterization: Mixture

3.2 Mixtures:

Hazardous ingredients	CAS #	Concentration	EC#
graphite	7782-42-5	25-50%	231-955-3
xylene	1330-20-7	10-25%	215-535-7
methyl ethyl ketone	78-93-3	10-25%	201-159-0
acetone	67-64-1	10-25%	200-662-2
2-methoxy-1-methylethyl acetate	108-65-6	2.5-10%	203-603-9
ethyl acetate	141-78-6	2.5-10%	205-500-4

Section 4: First Aid Measures

4.1 Description of first aid measures:

Ingestion:

If swallowed, do not induce vomiting. Wash out mouth with plenty of water.

Skin contact

If excessive skin contact with this product occurs, flush immediately with plenty of water, followed by washing with soap and water. If clothing is contaminated with the product, remove clothing, and wash thoroughly to remove all signs of the black product before wearing. If the product residues persist, disposed of such contaminated clothing.

Eye contact

If this product is splashed into the eyes, flush eyes immediately with plenty of water for at least 15 minutes.

Inhalation

If excessive amounts of vapors or mists from this product are inhaled, remove to fresh air. Apply artificial respiration and other supportive measures as required. Consult a poison center, emergency room or lung specialist for additional information and guidance.

4.2 Most important symptoms and effects, both acute and delayed:

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5: Fire Fighting Measures

5.1 Extinguishing media: CO2, sand, extinguishing powder. Do not use water. **Do not use water with full jet.**

5.2 Special hazards arising from the substance or mixture:

Hazardous combustion products – Carbon monoxide and Carbon dioxide.

May evolve toxic fumes in fire or when heated.

5.3 Advice for firefighters:

Wear full firefighting protective clothing, including a full face piece, positive pressure, self contained breathing apparatus.

Section 6: Accidental Release Measures

6.1 Personal precautions – Wear protective equipment. Keep unprotected persons away.

6.2 Environmental precautions – Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up – Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to Section 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

6.4 Reference to other sections
See section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

Section 7: Handling and Storage

7.1 Precautions for safe handling
Use only in a chemical fume hood. Keep away from all sources of ignition. Do not smoke when handling this material.

7.2 Conditions for safe storage, including any incompatibilities
Store in closed containers away from all sources of ignition.
7.3 Specific end uses
No further relevant information available.

Section 8: Exposure Controls and Personal Protection

8.1 Control parameter and Personal Protection
Workplace exposure limits

CAS#	Long-term PEL	Short-term REL	Long-term REL	Short-term TLV	Long-Term TLV
1330-20-7	435 mg/m^3	655 mg/m^3	435 mg/m^3	651 mg/m^3	434 mg/m^3
Xylene	100 ppm	150 ppm	100 ppm	150 ppm	100 ppm
78-93-6	590 mg/m^3	885 mg/m^3	590 mg/m^3	885 mg/m^3	590 mg/m^3
Methyl ethyl ketone	200ppm	300 ppm	200 ppm	300 ppm	200 ppm
67-64-4	2400 mg/m^3		590 mg/m^3	1187 mg/m^3	594 mg/m^3
Acetone				500 ppm	250 ppm
141-78-6	1400 mg/m^3		1400 mg/m^3		140 mg/m^3
Ethyl acetate	400 ppm		400 ppm		400 ppm

108-65-6 Workplace Environmental Exposure Level: 50 ppm Long-term value
2-Methoxy-1-methylethyl acetate

Biological limit values
1330-20-7 Xylene
BEI:1.5 g/g creatinine MEDIUM:urine TIME: end of shift PARAMETER: Methylhippuric acids

78-93-9 Methyl ethyl ketone
BEI: 2 mg/L MEDIUM: urine TIME: end of shift PARAMETER: MEK

67-44-1 Acetone, reagent grade
BEI: 50 mg/L MEDIUM: urine TIME: end of shift PARAMETER: acetone (non specific)

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

8.2.2 Individual protection measures

Breathing equipment: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Skin: Protective clothing such as long sleeves or a lab coat should be worn.

Gloves: The glove material has to be impermeable and resistant to the product / the substance / the preparation.

Eye protection: Tightly sealed chemical safety goggles.

8.2.3 Environmental exposure controls

Use only in a chemical fume hood. Do not exceed exposure levels.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:

Form: Fluid

Color: According to product specification

Odor: Solvent like

Odor threshold: Not determined

pH: Not determined

Melting point/Freezing point: Undetermined

Boiling point/Boiling point range: 55 °C (131 °F)

Flash Point: -19 °C (-2 °F)

Evaporation rate: Not determined

Flammability (solid, gas): Not flammable

Upper/lower flammability or explosive limits:

Lower: 1.1 Vol %

Upper: 13.0 Vol %

Vapor Pressure at 20 °C (68 °F): 233 hPa (175 mm Hg)

Vapor density: Not determined

Relative density: Not determined

Solubility in (Miscibility with) water: Not miscible or difficult to mix

Partition coefficient (n-octanol/water): Not determined

Ignition temperature: 315 °C (599 °F)

Auto igniting: Product is not selfigniting

Decomposition temperature: Not determined

Viscosity:

Dynamic: Not determined

Kinematic: Not determined

Explosive properties: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

Solvent content:

Organic solvents: 54.0 %

VOC content: 42.0 %

495.2 grams/liter / 4.13 pounds/gallon

9.2 Other information: No further relevant information available.

Section 10: Stability and Reactivity

10.1 Reactivity: No further relevant information available.

10.2 Chemical Stability:
Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of Hazardous Reactions: No dangerous reactions known.

10.4 Conditions to avoid: No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: No dangerous decomposition products known.

Section 11: Toxicological Information

Information on toxicological effects:

Acute toxicity:

LD/LC50	CAS# 1330-20-7		Xylene
Oral:	LD50	rat	4300 mg/kg
Dermal:	LD50	rabbit	2000mg/kg

11.1 **Information on toxicological effects**

Primary irritant effect:

On the skin: No irritant effect

On the eye: Irritating effect

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

Carcinogenic categories:

IARC (International Agency for Research on Cancer): 1330-20-7 Xylene

NTP (National Toxicology Program): None of the ingredients is listed.

OSHA-Ca (Occupational Safety Health Administration): None of the ingredients is listed.

Section 12: Ecological Information

12.1 **Toxicity**

Aquatic toxicity: No further relevant information available.

12.2 **Persistence and degradability**: No further relevant information available.

12.3 **Bioaccumulative potential:** No further relevant information available.

12.4 **Mobility in soil:** No further relevant information available.

12.5 **Additional ecological information:**

General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

12.6 **Results of PBT and vPvB assessment:**

PBT: Not applicable

vPvB: Not applicable

12.7 **Other adverse effects:** No further relevant information available.

Section 13: Disposal Considerations

13.1 **Waste treatment methods**

Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

Uncleaned packagings:

recommendation: Disposal must be made according to official regulations.

Section 14: Transport Information

DOT
IATA
IMDG

14.1 UN number (DOT, ADR, IMDG, IATA): UN1993

14.2 UN proper shipping name:

DOT: Flammable liquids, n.o.s. (Acetone, Ethyl methyl ketone (Methyl ethyl ketone))

ADR: 1993 Flammable liquids, n.o.s. (Acetone, Ethyl methyl ketone (Methyl ethyl ketone))

IMDG, IATA: FLAMMABLE LIQUID, N.O.S. (ACETONE, ETHYL METHYL KETONE (METHYL ETHYL KETONE))

14.3 Transport hazard class(es):
Class 3 Flammable liquids
Label: 3

14.4 Packing Group: II

14.5 Environmental hazards: No

14.6 Special precautions for user: Warning: Flammable liquids

Danger code (Kemler): 33
EMS Number: F-E, S-E

Transport / Additional information:

DOT quantity limitations:	On passenger aircraft/rail: 5 Liters On cargo aircraft only: 60 Liters
ADR Excepted quantities (EQ):	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
IMDG:	
Limited quantities (LQ):	1 Liter
Excepted quantites (EQ):	Code E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN “Model Regulation”:	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ACETONE, ETHYL METHYL KETONE), 3, II

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture

OSHA specifically regulated substances

TSCA (Toxic Substances Control Act): All ingredients are listed

SARA (Superfund Amendments and Reauthorization Act)

SARA 313 (Specific toxic chemical listings):

1330-20-7	Xylene
78-93-3	Methyl ethyl ketone

SARA 355 (Extremely hazardous substances):
none listed

SARA 311/312 Hazards
1330-20-7: Fire hazard, Acute health hazard, Chronic health hazard
78-98-3: Fire hazard, Acute health hazard, Chronic health hazard
67-64-1: Fire hazard, Acute health hazard, Chronic health hazard
141-78-6: Fire hazard, Acute health hazard, Chronic health hazard

CERCLA Reporting Quantities:
67-64-1: 5,000 pounds
78-93-3: 5,000 pounds
1330-20-7: 100 pounds
141-78-6: 5,000 pounds

RCRA Codes:
67-64-1: U002
78-93-3: U159
1330-20-7: U239

141-78-6: U112

EPA (Environmental Protection Agency) – Carcinogenic Categories

141-78-6: Category B2 – probable carcinogen, sufficient evidence in animals

1330-20-7: Category InI -inadequate information to assess carcinogenic potential

78-93-3: Category D – not classifiable based on lack of data

NIOSH-Ca (Nathional Institute for Occupational Safety and Health):

None of the ingredients is listed.

State Right-to-Know lists:

7782-42-5 is listed on the Massachusetts, Pennsylvania, and New Jersey lists.
1330-20-7 is listed on the Massachusetts, Pennsylvania, and New Jersey lists
78-93-3 is listed on the Massachusetts, Pennsylvania, and New Jersey lists
67-64-1 is listed on the Massachusetts, Pennsylvania, and New Jersey lists
108-65-6 is listed on the Massachusetts, Pennsylvania, and New Jersey lists
141-78-6 is listed on the Massachusetts, Pennsylvania, and New Jersey lists

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

Other information:
Date of preparation: March 9, 2016.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division the the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
PEL: Permissible Exposure Limitations
REL: Recommended Exposure Limitations
BEI: Biological Exposure Limit
STOT SE: Specific target organ toxicity – single exposure

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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