

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 1 of 9

1 PRODUCT AND COMPANY IDENTIFICATION

Supplier

United Nuclear Scientific
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Klamath Falls, OR 97601

Contact: United Nuclear Scientific
Phone: (541) 205-6855
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Product Name: Synthetic Graphite
Revision Date: 3/14/2016
Version: 6
SDS Number: 200
Common Name: Carbon, Graphite
CAS Number: 7782-42-5
Chemical Formula: C
Synonyms: Graphite
Product Use: High Temperature Applications, Friction Reduction, Lubrications, Coatings, and Conductive Additive

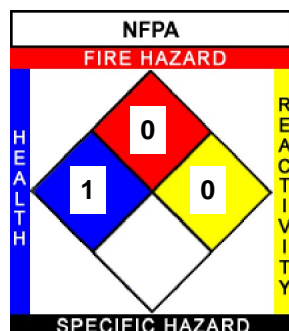
24 HR EMERGENCY Telephone Number

VelocityEHS (USA): 800-255-3924

2 HAZARDS IDENTIFICATION

NFPA:
HMIS III:

Health = 1, Fire = 0, Reactivity = 0
H1/F0/PH0



HMIS III	
HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION E Safety Glasses, Gloves, Dust Respirator	

PERSONAL PROTECTION INDEX															
A			G												
B			H												
C			I												
D			J												
E			K												
F			X	Consult your supervisor or S.O.P. for "SPECIAL" handling directions											
A		n		O		p		q		r		s			
t		u		w		y		z							

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 2 of 9

GHS Signal Word:

WARNING

GHS Hazard Pictograms:



GHS Classifications:

Health, Skin corrosion/irritation, 3

Health, Serious Eye Damage/Eye Irritation, 2 B

Health, Specific target organ toxicity - Single exposure, 3

GHS Phrases:

H316 - Causes mild skin irritation

H320 - Causes eye irritation

H335 - May cause respiratory irritation

GHS Precautionary Statements:

P261 - Avoid breathing dust produced while using this product.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P281 - Use personal protective equipment as required.

P285 - In case of inadequate ventilation wear respiratory protection.

P304+341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 - IF IN EYES: Do NOT rub. Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

P337+313 - If eye irritation persists: Get medical advice/attention.

P342 - If experiencing respiratory symptoms: Get medical advice/attention.

P402 - Store in a dry place.

P501 - Dispose of contents/container to an approved waste disposal plant.

May form combustible dust concentrations in air.

3

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

7782-42-5 | 100% | Synthetic Graphite

4

FIRST AID MEASURES

Inhalation: Blow nose to remove substance from nasal passages. Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Generally this product does not irritate the skin except through mechanical abrasion. As a precaution, take off contaminated clothing and shoes immediately. Promptly flush skin with water for at least 15 minutes to

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 3 of 9

ensure all chemical is removed. If reddening develops and/or persists, obtain medical attention.

Eye Contact: Do NOT rub eyes. Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses if present and easy to do so. If eye irritations persists, obtain medical attention.

Ingestion: Generally this product does not irritate through ingestion. Rinse mouth with water. Give 3-4 glasses of water or milk to dilute stomach contents. Do NOT induce vomiting. If vomiting occurs, give more water or milk. Never give anything by mouth to an unconscious person. If symptoms develop and/or persist, obtain medical attention.

No data available.

5

FIRE FIGHTING MEASURES

Flammability: Combustible at high temperatures when finely dispersed in air.

Flash Point: No data available

Flash Point Method: DNA

Burning Rate: No data available

Autoignition Temp: 300 °C (572 °F) (air method)

LEL: Not determined

UEL: Not determined

See Section 13 for disposal information.

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 4 of 9

6**ACCIDENTAL RELEASE MEASURES**

See Section 13 for information on proper disposal.

7**HANDLING AND STORAGE****Handling Precautions:**

Wear protective clothing.
Avoid breathing dusts.
Avoid formation of dusts.
Avoid contact with eyes, skin, or clothing.
Keep containers closed when not in use.
Do not expose containers to open flame, excessive heat, or direct sunlight.
Do not puncture or drop containers.
Handle with care and avoid spillage on the floor.
Keep material out of reach of children.
Keep material away from incompatible materials.
Wash thoroughly after handling.
Ensure adequate ventilation.
Synthetic Graphite is a good conductor of electricity. Use caution when handling in areas where contact with electrical circuitry is possible.

Storage Requirements:

Keep container tightly closed.
Store in a dry place.

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 5 of 9

Store away from strong acids, strong oxidizing agents, chlorinated paraffins, lead oxide, manganese oxide, iron oxide, liquid oxygen, oils, chlorine trifluoride, liquid potassium, liquid rubidium, liquid caesium, potassium peroxide, fluorine, and moisture.

If Synthetic Graphite contacts liquid potassium, liquid rubidium or liquid caesium at 300 °C (572 °F), intercalation compounds may be formed. These compounds may explode on contact with water or ignite in air.

8**EXPOSURE CONTROLS/PERSONAL PROTECTION**

Engineering Controls: All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip: Eye/face protection:
When using material use safety glasses, gloves and dust respirator according to HMIS PP, E. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:

Handle with gloves made from PVC, butyl-rubber, neoprene, nitrile or fluorinated rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection:

Not required. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection:

Use of a dust respirator is highly recommended when using material in poorly ventilated spaces or in a manner that generates dust. For limited exposure to airborne dust use a dust mask of N95 rating or higher. For prolonged exposure, at a minimum use an air-purifying respirator with high efficiency particulate air (HEPA) filter. Full-face dust respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure:

Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component(s): Synthetic Graphite

CAS No(s): 7782-42-5

USA ACGIH (TWA/TLV): 2.0 mg/m³

USA NIOSH (TWA/REL): 2.5 mgm³

USA OSHA Occupational Exposure Limits - Table Z-1 Limits for Air Contaminants (TWA): 15.0 mg/m³

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 6 of 9

Contains no substances with biological occupational exposure limits values.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Gray to black solid (powder)	Odor:	Odorless
Physical State:	Solid	Molecular Formula:	C
Odor Threshold:	Not determined	Solubility:	Insoluble
Particle Size:	Not determined	Softening Point:	Not determined
Spec Grav./Density:	2.190 - 2.260 g/cm ³	Percent Volatile:	DNA
Viscosity:	Not determined	Heat Value:	Not determined
Sat. Vap. Conc.:	Not determined	Freezing/Melting Pt.:	3652 - 3697 °C (6606 - 6687 °F)
Boiling Point:	Not determined	Flash Point:	DNA
Flammability:	(solid, gas): Combustible	Octanol:	Not determined
Partition Coefficient:	Not determined	Vapor Density:	(air = 1): Not determined
Vapor Pressure:	(mm Hg @ 25 °C): Not determined	VOC:	DNA
pH:	@ 100%: DNA	Bulk Density:	Not determined
Evap. Rate:	(nBuAc = 1): DNA	Auto-Ignition Temp:	300 °C (572 °F) (air method)
Molecular weight:	12.01 g/mol	UFL/LFL:	Not determined
Decomp Temp:	Not determined		

10 STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Incompatibilities, flames, ignition sources, moisture, and accumulation of dust.
Materials to Avoid:	Strong acids, strong oxidizing agents, chlorinated paraffins, lead oxide, manganese oxide, iron oxide, liquid oxygen, oils, chlorine trifluoride, liquid potassium, liquid rubidium, liquid caesium, potassium peroxide, fluorine, and moisture. If Synthetic Graphite contacts liquid potassium, liquid rubidium or liquid caesium at 300 °C (572 °F), intercalation compounds may be formed. These compounds may explode on contact with water or ignite in air.
Hazardous Decomposition:	Carbon Oxides.
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Component(s): Synthetic Graphite

CAS No(s): 7782-42-5

Acute Toxicity:

LD50 Oral - Rat: > 2,000 mg/kg

LD50 Inhalation - Rat: 2,000 mg/m³ (4 h)

Skin Corrosion/Irritation: Mechanical abrasion may cause skin irritation.

Serious Eye Damage/Eye Irritation: Mechanical abrasion causes eye irritation.

Respiratory or Skin Sensitation: Mouse skin - Did not cause sensitisation.

Germ Cell Mutagenicity: No data available.

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 7 of 9

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity - Single Exposure: Respiratory system - May cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure: No data available.

Aspiration Hazard: No data available.

Additional Information:

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 8 of 9

13**DISPOSAL CONSIDERATIONS**

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

14**TRANSPORT INFORMATION**

Non-regulated material, solid

15**REGULATORY INFORMATION**

TXAIR = TX Air Contaminants with Health Effects Screening Level

Synthetic Graphite

SDS Number: 200

Revision Date: 3/14/2016

Page 9 of 9

16**OTHER INFORMATION****Disclaimer:**

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that United Nuclear Scientific believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of United Nuclear Scientific's control, United Nuclear Scientific makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

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