



Plain Pin UHP-GE; Graphite Electrode with Connecting Pin

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 07/26/2013

Supersedes: 05/01/2005

Version: 1.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier

Product Name: Plain Pin UHP-GE; Graphite Electrode with Connecting Pin

Intended Use of the Product

For steel recycling, used in the melting of scrap steel in EAFs (electric arc furnaces)

Name, Address, and Telephone of the Responsible Party

Company

Showa Denko Carbon, Inc.

478 Ridge Road

PO Box 2947201

Ridgeville, SC 29472

843-875-3200

sdkc.com

Emergency Telephone Number

Emergency number : 843-875-3200

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

Label Elements

GHS-US Labeling

No labelling applicable

Other Hazards Not available

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Graphite	(CAS No) 7782-42-5	100	Not classified

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area.

Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: Rinse mouth. Do NOT induce vomiting.

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Skin Contact: None expected under normal conditions of use.

Eye Contact: None expected under normal conditions of use.

Ingestion: May be harmful if swallowed.

Chronic Symptoms: Not available

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

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SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable

Explosion Hazard: Product is not explosive

Reactivity: Product is stable

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂)

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: No special measures required

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Stop release.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

Specific End Use(s) For steel recycling, used in the melting of scrap steel in EAFs (electric arc furnaces)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Graphite (7782-42-5)		
Mexico	OEL TWA (mg/m ³)	2 mg/m ³ (natural)
USA ACGIH	ACGIH TWA (mg/m ³)	2 mg/m ³ (all forms except graphite fibers)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ (synthetic)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	2.5 mg/m ³ (natural)
USA IDLH	US IDLH (mg/m ³)	1250 mg/m ³
Alberta	OEL TWA (mg/m ³)	2 mg/m ³ (all forms except Graphite fibres)

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British Columbia	OEL TWA (mg/m ³)	2 mg/m ³ (all forms except Graphite fibres)
Manitoba	OEL TWA (mg/m ³)	2 mg/m ³ (all forms except Graphite fibers)
New Brunswick	OEL TWA (mg/m ³)	2 mg/m ³ (all forms except graphite fibres)
Newfoundland & Labrador	OEL TWA (mg/m ³)	2 mg/m ³ (all forms except Graphite fibers)
Nova Scotia	OEL TWA (mg/m ³)	2 mg/m ³ (all forms except Graphite fibers)
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³ (synthetic, total mass)
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³ (synthetic, total mass)
Ontario	OEL TWA (mg/m ³)	2 mg/m ³ (except Graphite fibres)
Prince Edward Island	OEL TWA (mg/m ³)	2 mg/m ³ (all forms except Graphite fibers)
Québec	VEMP (mg/m ³)	2 mg/m ³ (containing no Asbestos and <1% Crystalline silica, except Graphite fibres)
Saskatchewan	OEL STEL (mg/m ³)	4 mg/m ³ (natural, except Graphite fibres)
Saskatchewan	OEL TWA (mg/m ³)	2 mg/m ³ (natural, except Graphite fibres)
Yukon	OEL TWA (mg/m ³)	10 mg/m ³ (synthetic)

Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Not required for normal conditions of use, but may be necessary as conditions warrant.

Materials for Protective Clothing: Not available

Hand Protection: Impermeable protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Wear approved mask.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: Black, gray
Odor	: Not available
Odor Threshold	: Not available
pH	: Not available
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: 3700 - 4200 °C (6692 - 7592°F)
Freezing Point	: Not available
Boiling Point	: 4200 °C (7592°F)
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: 1.4 - 1.9
Specific Gravity	: 1.4 - 1.9
Solubility	: Not available
Log Pow	: Not available
Log Kow	: Not available
Viscosity, Kinematic	: Not available

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Viscosity, Dynamic : Not available
Explosion Data – Sensitivity to Mechanical Impact : Not available
Explosion Data – Sensitivity to Static Discharge : Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Product is stable.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Direct sunlight. Extremely high or low temperatures.
Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.
Hazardous Decomposition Products: Carbon oxides (CO, CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity : Not classified
LD50 and LC50 Data Not available
Skin Corrosion/Irritation: Not classified
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not available
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified.
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/Injuries After Skin Contact: None expected under normal conditions of use.
Symptoms/Injuries After Eye Contact: None expected under normal conditions of use.
Symptoms/Injuries After Ingestion: May be harmful if swallowed.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity Not available

Persistence and Degradability

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Persistence and Degradability	Not established.
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Bioaccumulative Potential

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Bioaccumulative Potential	Not established.
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Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

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SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/DOT/TDG

UN Number Not regulated for transport

UN Proper Shipping Name Not regulated for transport

Additional Information Not regulated for transport

Transport by sea Not regulated for transport

Air transport Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Graphite (7782-42-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Graphite (7782-42-5)

U.S. - Hawaii - Occupational Exposure Limits - TWAs
U.S. - Idaho - Occupational Exposure Limits - Mineral Dusts
U.S. - Idaho - Occupational Exposure Limits - TWAs
U.S. - Massachusetts - Right To Know List
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New York - Occupational Exposure Limits - Mineral Dusts
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour
U.S. - Oregon - Permissible Exposure Limits - Mineral Dusts
U.S. - Oregon - Permissible Exposure Limits - TWAs
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

Canadian Regulations

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WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
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Graphite (7782-42-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION

Indication of Changes : 07/23/2013

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Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

Party Responsible for the Preparation of This Document

Showa Denko Carbon, Inc.

Phone Number: 843-875-3200

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

North America GHS US 2012 & WHMIS