



Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

Section 1: Product and Company Identification

Product Name: DC Gouging Carbons- Copper Coated
Product Type: Gouging Carbon
Manufacturer: TECHNIWELD USA
Physical Address: 6205 BOAT ROCK BLVD
ATLANTA, GA 30336
Mailing Address: P.O. Box 44226
ATLANTA, GA 30336
Business Phone: 404-699-9900
Business Fax: 404-699-7800
E-mail Address: info@TWUSA.COM
Web Address: www.TWUSA.COM
Emergency Phone: CHEMTREC (24-Hour) 1-800-424-9300
Outside of the USA & Canada 1-703-527-3887
Date of Preparation:
OSHA Regulatory Status: Non-Regulated
Classification: Not a Controlled Product

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- **Explosives:** *Not applicable*
 - **Flammable gases:** *Not applicable*
 - **Aerosols:** *Not applicable*
 - **Oxidizing gases:** *Not applicable*
 - **Gases under pressure:** *Not applicable*
 - **Flammable liquids:** *Not applicable*
 - **Flammable solids:** *Not applicable*
 - **Self-reactive substances and mixtures:** *Not applicable*
 - **Pyrophoric liquids:** *Not applicable*
 - **Pyrophoric solids:** *Not applicable*
 - **Self-heating substances and mixtures:** *Not applicable*
 - **Substances and mixtures, which emit flammable gases in contact with water:** *Not applicable*

Section 2: Hazards Identification

Classification according to regulation (EC) 1272/2008: The product is not classified according to CLP Regulation.
Regulation (EC) No 1272/2008 [CLP]: *Not applicable*
Classification procedure: *Not applicable*

Section 3: Composition and Information on Ingredients

Description: Copper coated gouging carbons

Substance/Mixture: Mixture

Ingredient(s):

Chemical Name	Registration #	CAS No.	EC No.	Concentration
Petroleum coke	N/A	N/A	N/A	5%
Asphaltum	N/A	8052-42-4	231-820-9	15%
Electrolytic copper	N/A	7440-50-8	231-159-6	5%
Graphite	N/A	7782-42-5	231-955-3	75%

Section 4: First Aid Measures

After inhalation: *Not applicable*

After skin contact: *Not applicable*

After eye contact: *Not applicable*

After swallowing: *Not applicable*

Section 5: Fire Fighting Measures

Useful extinguishing agent: Not flammable

Special danger: None

Special fire-protections: None

Other information: None

Section 6: Accidental Release Measures

Protections for persons, cleaning, and environment: Not applicable

Section 7: Handling and Storage

Handling: No specific requirements in the form supplied. Handle with care to avoid cuts.

Storage: Store in a dry, covered place.

Section 8: Exposure Controls / Personal Protection

VENTILATION: Use enough ventilation, local exhaust at the arc or both to keep the fumes and gases below the PEL/TLV/OELs in the worker's breathing zone and the general area. Train the welder to keep his head out of the fumes.

RESPIRATORY PROTECTION: Use in OSHA approved or equivalent fume respirator or air supplied respirator when welding in confined space or where local exhaust or ventilation does not keep exposure below the regulatory limits.

EYE PROTECTION: Wear helmet or use face shield with filter lens. As a rule of thumb begin with Shade Number 14. Adjust if needed by selecting the next lighter and/or darker shade number. Provide protective screens and flash goggles, if necessary, to shield others from the weld arc flash.

PROTECTIVE CLOTHING: Wear hand, head and body protection which help to prevent injury from radiation, sparks and electrical shock. See ANSI Z49.1. At a minimum this includes welder's gloves and a protective face shield, and may include arm protectors, aprons, hats, shoulder protection as well as dark non-synthetic clothing. Train the welder not to touch live electrical parts and to insulate himself from work and ground.

PROCEDURE FOR CLEANUP OF SPILLS OR LEAKS: Not applicable

SPECIAL PRECAUTIONS (IMPORTANT): Maintain exposure below the PEL/TLV/OEL. Use industrial hygiene monitoring to ensure that your use of this material does not create exposures which exceed PEL/TLV/OEL. Always use exhaust ventilation.

Refer to the following sources for important additional information: American National Standard (ANSI) Z49.1; Safety in Welding and Cutting published by the American Welding Society, P.O. Box 351040, Miami, FL 33135 and OSHA Publication 2206 (29 CFR1910), U.S. Government Printing Office, Washington, DC 20402.

Section 9: Physical and Chemical Properties

Section 10: Stability and Reactivity

GENERAL: Welding consumables applicable to this sheet are solid and nonvolatile as shipped. This product is only intended for use per the welding parameters it was designed for. When this product is used for welding, hazardous fumes may be created. Other factors to consider include the base metal, base metal preparation and base metal coatings. All of these factors can contribute to the fume and gases generated during welding. The amount of fume varies with the welding parameters.

STABILITY: This product is stable under normal conditions.

REACTIVITY: Contact with acids or strong bases may cause generation of gas.

Section 11: Toxicological Information

SHORT-TERM (ACUTE) OVEREXPOSURE EFFECTS:

Welding Fumes - May result in discomfort such as dizziness, nausea or dryness or irritation of nose, throat or eyes.

Chromium - Inhalation of fume with chromium (VI) compounds can cause irritation of the respiratory tract, lung damage and asthma-like symptoms. Swallowing chromium (VI) salts can cause severe injury or death. Dust on skin can form ulcers. Eyes may be burned by chromium (VI) compounds. Allergic reactions may occur in some people.

Iron, Iron Oxide - None are known. Treat as nuisance dust or fume.

Manganese - Metal fume fever characterized by chills, fever, upset stomach, vomiting, irritation of the throat and aching of body. Recovery is generally complete within 48 hours of the overexposure.

Molybdenum - Irritation of the eyes, nose and throat.

Nickel, Nickel Compounds - Metallic taste, nausea, tightness in chest, metal fume fever, allergic reaction.

Silica (Amorphous) - Dust and fumes may cause irritation of the respiratory system, skin and eyes.

LONG-TERM (CHRONIC) OVEREXPOSURE EFFECTS:

Welding Fumes - Excess levels may cause bronchial asthma, lung fibrosis, pneumoconiosis or "siderosis."

Chromium - Ulceration and perforation of nasal septum. Respiratory irritation may occur with symptoms resembling asthma. Studies have shown that chromate production workers exposed to hexavalent chromium compounds have an excess of lung cancers. Chromium (VI) compounds are more readily absorbed through the skin than chromium (III) compounds. Good practice requires the reduction of employee exposure to chromium (III) and (VI) compounds.

Iron, Iron Oxide Fumes - Can cause siderosis (deposits of iron in lungs) which some researchers believe may affect pulmonary function. Lungs will clear in time when exposure to iron and its compounds ceases. Iron and magnetite (Fe₃O₄) are not regarded as fibro genic materials

Manganese - Long-term overexposure to manganese compounds may affect the central nervous system. Symptoms may be similar to Parkinson's disease and can include slowness, changes in handwriting, gait impairment, muscle spasms and cramps and less commonly, tremor and behavioral changes. Employees who are overexposed to manganese compounds should be seen by a physician for early detection of neurologic problems. Overexposure to manganese and manganese compounds above safe exposure limits can cause irreversible damage to the central nervous system, including the brain, symptoms of which may include slurred speech, lethargy, tremor, muscular weakness, psychological disturbances and spastic gait.

Molybdenum - Prolonged overexposure may result in loss of appetite, weight loss, loss of muscle coordination, difficulty in breathing and anemia

Nickel, Nickel Compounds - Lung fibrosis or pneumoconiosis. Studies of nickel refinery workers indicated a higher incidence of lung and nasal cancers.

Silica (Amorphous) - Research indicates that silica is present in welding fume in the amorphous form. Long term overexposure may cause pneumoconiosis. Nanocrystalline forms of silica (amorphous silica) are considered to have little fibrotic potential.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Persons with pre-existing impaired lung functions (asthma like conditions). Persons with a pacemaker should not go near welding and cutting operations until they have consulted their doctor and obtained information from the manufacturer of the device. Respirators are to be worn only after being medically cleared by your company-designated physician.

EMERGENCY AND FIRST AID PROCEDURES: Call for medical aid. Employ first aid techniques recommended by the American Red Cross. Eyes and Skin: If irritation or flash burns develop after exposure, consult a physician.

CARCINOGENICITY: Chromium VI compounds and nickel compounds are classified as IARC Group 1 and NTP Group K carcinogens. Chromium VI, nickel compounds and welding fumes must be considered as possible carcinogens under OSHA (29 CFR 1910.1200).

CALIFORNIA PROPOSITION 65: WARNING: These products contain or produce a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code Section 25249.5 et seq.)

Section 12: Ecological Information

Welding processes can release fumes directly to the environment. Welding wire can degrade if left outside and unprotected. Residues from welding consumables and processes could degrade and accumulate in the soil and groundwater.

Section 13: Disposal Considerations

Rolled goods can be used as building waste or to be disposed as general waste.
Packaging materials can be disposed of according to local rules

Section 14: Transportation Information

Use recycling procedures if available. Discard any product, residue, packaging, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state and local regulations.

UN-Number:	Land Transport (ADR/RID)	Sea Transport (IMDG)	Air Transport (ICAO/IATA)
UN Proper shipping name:	Not regulated	Not regulated	Not regulated
Transport hazard class:	Not regulated	Not regulated	Not regulated
Packaging group:	Not regulated	Not regulated	Not regulated
Environmental hazards:	Not regulated	Not regulated	Not regulated
Special precautions for user:	No	No	No

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not regulated	Not regulated	Not regulated
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Section 15: Regulatory Information

Read and understand the manufacturer’s instructions, your employer’s safety practices and the health and safety instructions on the label and the material safety data sheet. Observe all local and federal rules and regulations. Take all necessary precautions to protect yourself and others.

United States EPA Toxic Substance Control Act: All constituents of these products are on the TSCA inventory list or are excluded from listing. **Others:** The regulation and information refer to actual known standards. There are no guaranteed characteristics. The processing company must ensure itself to local standards and to follow them.

Section 311 Hazard Class

As shipped: Immediate In use: Immediate delayed

EPCRA/SARA TITLE III 313 TOXIC CHEMICALS: The following metallic components are listed as SARA 313 “Toxic Chemicals” and potentially subject to annual SARA 312 reporting: Chromium, Manganese and Nickel. See Section 3 for weight percentage.

CANADIAN WHMIS CLASSIFICATION: Class D; Division 2, Subdivision A

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA): All constituents of these products are on the Domestic Substance List (DSL).

Section 16: Other Information

USA: American National Standard (ANSI) Z49.1 “Safety in Welding and Cutting”, ANSI/American Welding Society (AWS) F1.5 “Methods for Sampling and Analyzing Gases from Welding and Allied Processes”, ANSI/AWS F1.1 “Method for Sampling Airborne Particles Generated by Welding and Allied Processes”, AWSF3.2M/F3.2 “Ventilation Guide for Weld Fume”, American Welding Society, 550 North Le Jeune Road, Miami, Florida, 33135. Safety and Health Fact Sheets available from AWS at www.aws.org.

OSHA Publication 2206 (29 C.F.R. 1910), U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Threshold Limit Values and Biological Exposure Indices, American Conference of Governmental Hygienists (ACGIH), 6500 Glenway Ave., Cincinnati, Ohio 45211, USA. NFPA 51B “Standard for Fire Prevention during Welding, Cutting and Other Hot Work” published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169.

UK: WMA Publication 236 and 237, “Hazards from Welding Fume”, “The arc welder at work, some general aspects of health and safety”. Canada: CSA Standard CAN/CSA-W117.2-01 “Safety in Welding, Cutting and Allied Processes”.

Notice to reader: Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.
