

# Material Safety Data Sheet - MSDS

#### Section 1. Chemical Product and Company Identification Product name

Blueshield:

Classification

CSA:

Classification

**BLUESHIELD Pro Gouging** 

Electrode

Description

: Gouging Carbon Electrodes.

: 1-514-878-1667

Generic Code

: AL-Gouging

In case of emergency

AWS:

: 01/30/2008

Supplier

: Air Liquide Canada Inc. 1250, René-Lévesque West, Suite 1700, Montreal, QC H3B 5E6

#### Section 2. Hazards Identification

Physical state and Appearance

Emergency overview

: These hazards relate to welding fumes (electrodes in use) and not to the electrodes as sold.

WARNING!

ELECTRIC SHOCK can kill.

FUMES AND GASES can be dangerous to your health.

ARC RAYS can injure eyes and burn skin.

CANCER HAZARD CONTAINS MATERIAL WHICH CAN CAUSE CANCER MAY BE HARMFUL IF INHALED.

CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: BLOOD, KIDNEYS, LUNGS,

GASTROINTESTINAL TRACT, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYES.

CAUSES EYE AND SKIN IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION.

Risk of cancer depends on duration and level of exposure.

Routes of entry

Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eyes: Slightly hazardous by the following route of exposure: of eye contact (irritant).

Skin : Slightly hazardous by the following route of exposure: of skin contact (irritant).

Inhalation: May be harmful by inhalation.

Ingestion: Since the product (welding fumes) is a gas and that it is mostly probable that it will be inhaled more than ingested, please consider

otential chronic health effects Carcinogenic effects(\*): Classified 1 by NTP, + by NIOSH [Graphite]. Classified A2 by ACGIH, 2A by IARC [Graphite].

TERATOGENIC EFFECTS: Not available

Medical conditions aggravated

by over-exposure

Repeated exposure to the fumes emitted while using this material may produce general deterioration of health.

(\*) See Abbreviations (section 16).

# Section 3. Composition, Information on Ingredients

Name			
Graphite	CAS#	% by weight	UN number
Copper Pitch, coal tar The fumes emitted by the electrodes, in use, are hazardous. This MSD See Section 8 for Exposure Limits of the oxides found in the welding to	7782-42-5 7440-50-8 65996-93-2 S is written for workers using tl	60 - 70 15 - 30 15 - 30 hese electrodes.	Not applicable. Not applicable. Not applicable.

See Section 8 for Exposure Limits of the oxides found in the welding fumes.

#### Section 4. First Aid Measures

Eye contact

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 20 minutes.

Skin contact

Wash with soap and water. Get medical attention if irritation develops.

Inhalation Ingestion

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If potentially dangerous quantities of this material have been swallowed, call a physician immediately.

1-800-817-7697

www.airliquide.ca

VIR LIQUIDE

Page: 1/4 AL-Gouging

# Section 5. Fire Fighting Measures

Flammability of the product

: Non-flammable. Emits toxic fumes when heated.

Explosibility

Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks

Fire-fighting media and instructions

: Use extinguishing media suitable for surrounding materials.

### Section 6. Accidental Release Measures

Small/Large Spill and Leak

Use appropriate tools to transfer the spilled solid to a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

#### Section 7. Handling and Storage

Handling

Avoid breathing dusts, vapors or fumes from burning materials. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Do not ingest. Keep container closed. Wash thoroughly after handling.

Storage

All filler metals in their original, unopened containers should be kept in a relatively dry storage area at temperatures between 15°C

# Section 8. Exposure Controls, Personal Protection

Engineering controls

Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal protection

Eyes : Safety glasses with side shields. Face shield with radiation shielding.

Body : Full suit. (Fire resistant.)

Respiratory: Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear a canister breathing apparatus (respirator) or a supplied-air respirator, when required, to weld in a confined space or when room exhaust or ventilation does not keep exposure

Hands: Gloves. (Fire resistant.) Feet : Metal cap, safety boots.

Exposure limits

Graphite

Pitch, coal tar

ACGIH TLV (United States, 1/2006). TWA: 2 mg/m³ 8 hour(s). Form: Dust

NIOSH REL (United States, 12/2001). TWA: 2.5 mg/m³ 10 hour(s). Form: Respirable fraction

OSHA PEL Z3 (United States, 9/2005). TWA: 15 mppcf 8 hour(s). Jopper ACGIH TLV (United States, 1/2006). TWA: 1 mg/m³, (Cu) 8 hour(s).

OSHA PEL (United States, 11/2006). TWA: 1 mg/m³ 8 hour(s). Form: Dusts NIOSH REL (United States, 12/2001). TWA: 1 mg/m³ 10 hour(s). Form: Dust

ACGIH TLV (United States, 1/2006). TWA: 0.2 mg/m³, (as benzene solubles) 8 hour(s). NIOSH REL (United States, 12/2001). TWA: 0.1 mg/m³ 10 hour(s). Form: Cyclohexane-extract OSHA PEL (United States, 11/2006). TWA: 0.2 mg/m³ 8 hour(s). Form: Benzene soluble

Consult local authorities for acceptable exposure limits.

### Section 9. Physical and Chemical Properties

Physical state and Appearance :

Color : Reddish-brown. Grayish-white.

Odor Odorless.

Melting/freezing point 1540 to 2030°C (2804 to 3686°F) Specific gravity Weighted average: 2.08 (Water = 1) Solubility

Insoluble in the following materials: cold water, hot water.

#### Section 10. Stability and Reactivity

Stability and reactivity

The product is stable.

Hazardous decomposition products

Metallic oxides. Carbon oxides (CO, CO<sub>2</sub>). Arc radiation can support the production of ozone and nitrogen oxides.

Hazardous polymerization Will not occur.

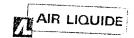
#### Section 11. Toxicological Information

Chronic effects and other toxic : CARCINOGENIC EFFECTS: See Section 2.

Contains material which causes damage to the following organs: kidneys, bladder, cardiovascular system, upper respiratory tract,

Acute exposure to welding fumes may result in discomfort such as: dizziness, nause or dryness of nose, throat or the eyes.

1-800-817-7697 www.airliquide.ca



Page: 2/4 **AL-Gouging** 

# Section 12. Ecological Information

Ecotoxicity data

ingredient name

Species

Period

Result

Daphnia magna (EC50)

48 hour(s)

Products of degradation

Pimephales promelas (LC50)

#### Decomposition products may include the following materials: carbon oxides (CO, CO₂). Some metallic oxides. Section 13. Disposal Considerations

Waste information

: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Recycle, if possible.

Consult your local or regional authorities.

#### Section 14. Transport Information

No transport class is found applicable to this product.

### Section 15. Regulatory Information

HCS Classification

: These hazards relate to welding fumes (electrodes in use) and not to the electrodes as sold.

Contains material which may cause cancer. Target organ effects

U.S. Federal regulations

: United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 307: Copper; Pitch, coal tar Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found. SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: Graphite; Copper; Pitch, coal tar

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Graphite: Immediate (acute) health hazard; Copper: Immediate (acute) health hazard; Pitch, coal tar: Delayed (chronic) health hazard

**SARA 313** 

Form R - Reporting requirements

Copper

10 - 30

Supplier notification State regulations

Copper

Massachusetts Substances: The following components are listed: Graphite; Copper, Pitch, coal tar New Jersey Hazardous Substances: The following components are listed: Copper;Pitch, coal tar New York Acutely Hazardous Substances: The following components are listed: Copper

Pennsylvania RTK Hazardous Substances: The following components are listed: Graphite; Copper;Pitch, coal tar

WARNING: This product contains a chemical known to the State of California to cause cancer.

WHMIS (Canada)

These hazards relate to welding fumes (electrodes in use) and not to the electrodes as sold.

Class D-2A: Material causing other toxic effects (Very toxic)

CEPA Toxic substances: The following components are listed: Pitch, coal tar

Canadian ARET: None of the components are listed.

Canadian NPRI: The following components are listed: Copper Alberta Designated Substances: None of the components are listed. Ontario Designated Substances: None of the components are listed. Quebec Designated Substances: None of the components are listed.

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the

#### Section 16. Other Information

Label requirements

References

Abbreviations

: See Section 2.

Hazardous Material Information System (U.S.A.)

: Health: 2\* Fire: 0 Reactivity: 0

National Fire Protection Association (U.S.A.)

: Health: 2 Fire: 0 Reactivity: 0 Other: None

: - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - CRC Handbook of chemistry and physics, 67th edition. CRC Press inc., Boca Raton, Florida. - Manufacturer's Material Safety Data Sheet. ANSI August 2015 Standard, 2004. ANSI Z49.1 Safety in Welding and Cutting, The American Welding Society, P.O. Box 351040, Miami, FL 33135. Canadian Standard Association, CSA W117.2, Code for Safety in Welding and Cutting, 2003.

ACGIH: American Conference of Governmental Industrial Hygiene.

ACGIH A2--Suspected Human Carcinogen.

IARC: International Agency for Research on Cancer.

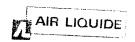
IARC 2A: Suspected for human

NIOSH: National Institute of Occupational Safety and Health. NIOSH +: Proven.

NTP: National Toxicology program. NTP 1: Known human carcinogens

1-800-817-7697

www.airliquide.ca



Page: 3/4 AL-Gouging Responsible name

Date of previous issue

: Atrion Regulatory Services, Inc.

: 09/30/2005

Version

Notice to reader

THE INFORMATION, RECOMMENDATIONS AND DATA CONTAINED IN THIS DOCUMENT ARE INTENDED TO BE USED BY PROPERLY TRAINED AND QUALIFIED PERSONNEL ONLY AND AT THEIR SOLE RISKS AND DISCRETION. THE INFORMATION, RECOMMENDATIONS AND DATA HEREIN CONTAINED ARE DERIVED FROM SOURCES WHICH WE BELIEVE TO BE RELIABLE. HOWEVER, AIR LIQUIDE CANADA INC. MAKES NO REPRESENTATION AND GIVES NO WARRANTY OF ANY KIND WHATSOEVER WITH RESPECT TO THEIR ACCURACY OR COMPLETENESS AND ASSUMES NO LIABILITY FOR DAMAGES OR LOSS ARISING DIRECTLY OR INDIRECTLY FROM THEIR USE, WHETHER PROPER OR IMPROPER.