

MATERIAL SAFETY DATA SHEET

1. Product and Supplier Identification

Product: Anthracite
Product Use: Carbon additive in steel production process
Supplier: Alexandria Intermediate Industries " MARCOGYPT"
 (Egyptian Nationality)
 Amreya industrial zone , El Nahda, El Karnak , Alexandria - Egypt
 Tel. :+203 4770445 - 4770446 - 4770447
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2. Composition

Product			Ingredients		
	% (w/w)	Respirable Silica (10µm particle size) % (w/w)	Exposure Limits/ACGIH₁	LD₅₀	LC₅₀
Anthracite Coal	100	N. Applicable	TLV-TWA 10 mg/m ³ Nuisance dusts	N. Applicable	N. Applicable

1 American Conference of Governmental Industrial Hygienists (ACGIH). Exposure limits may vary from time to time and from one jurisdiction to another. Check with local regulatory agency for the exposure limits in your area.

3. Hazards Identification

Routes of Entry:

Skin Absorption	:	No
Skin Contact	:	No
Eye Contact	:	No
Ingestion	:	No
Inhalation	:	Yes

Emergency Overview:

Dust created by this product during use may have minor respiratory effect. No other ill effects are expected from industrial exposure to this product.

Acute Health Effects:

Inhalation:

Inhalation of coal dust may cause irritation to the upper respiratory tract. Exposure may cause sore throat, coughing, sneezing, and the production of phlegm in the throat sensitive tissue.

Skin Contact:

Not applicable

Skin Absorption:

Not applicable

Eye Contact:

Contact with the eye will cause tearing and irritation from the "foreign" object in the eye. Rubbing of the eye may cause abrasion of the cornea.

Ingestion:

No evidence of ill effects from ingestion of this product.

Chronic Health Effects:

Prolonged and repeated breathing of high concentrations of coal dust can result in the accumulation of dust particles in the lungs; this can lead to bronchitis and may eventually develop into scarring of the lungs. Symptoms of this progressive disease which is called Coal Miner's Pneumoconiosis or "Black Lung" may be limited to cough, wheezing and sputum production in the early stages. In more advanced stages, usually after many years of exposure, more severe lung complications such as emphysema may develop.

Medical Conditions Aggravated by Exposure:

Respiratory problems may be aggravated by pre-existing lung disease such as bronchitis, emphysema, or chronic obstructive pulmonary disease.

4. First Aid Measures

Inhalation:

If irritation causes coughing or phlegm, remove to fresh air. Call for medical assistance if coughing doesn't subside.

Skin Contact:

Wash affected area thoroughly. If irritation persists, seek medical attention.

Eye Contact:

Immediately and thoroughly flush eyes with water until the foreign object is flushed out of the eye. If irritation, pain, swelling, or lacrimation exists, get medical attention as soon as possible.

Ingestion:

Ingestion of particulate is not considered to be injurious to health. Give fluids to aid in the passing of the product through the digestive system. Do not give anything by mouth to a convulsing or unconscious person. If patient shows discomfort, get immediate medical attention.

General Comments:

Good personal hygiene is essential. Avoid eating, smoking or drinking in work areas.

5. Fire Fighting Measures

Flammability

: Yes

Flash Point: 925 °C (in air)

Autoignition Temperature

Not established

Lower Explosive Limit

: Not established

Upper Explosive Limit

: Not established

Explosion Data

Sensitivity to Impact

No

Sensitivity to Static

: No

Discharge

Hazardous Combustion Products: Carbon dioxide, oxides of sulphur and nitrogen, and in the case of incomplete combustion, carbon monoxide and acrid smoke.

Conditions to Avoid: High heat, strong oxidizers

Extinguishing Media: CO₂, dry chemical, foam and water or water fog.

Fire Fighting Instructions: Evacuate area and fight fire from a safe distance or a protected area. Approach fire from upwind and, if possible, isolate materials not involved in the fire. Firefighters must wear self-contained breathing apparatus and full protective clothing.

6. Accidental Release Measures

Personal Protection:

Wear adequate personal protection to prevent inhalation of dusts or contact with eyes. See Section 8 for specific recommendations.

Environmental Precautions:

Prevent from spilling into waterways, sewers.

Cleanup Procedures:

Restrict access to area until completion of cleanup. Assess danger from a safe distance. Avoid harmful exposure to dusts. Only adequately trained personnel, wearing properly selected personal protective equipment and clothing described in Section 8, should be involved in the spill response and cleanup.

7. Handling and Storage

Handling Procedures:

Handle bags in a manner that will ensure minimal generation of dusts. Do not breathe dust, which may generate accidentally. Follow safe work procedures and wear the appropriate personal protective equipment specified in Section 8. The workers must be instructed and trained in the safe work procedures. Do not rely on sight to determine if dust is in the air. Coal may be in the air without a visible dust cloud. If dust cannot be kept below permissible limits, wear a high efficiency respirator approved for silica dust.

Storage:

Store away from incompatible materials. See Section 10.

8. Exposure Controls, Personal Protection

Engineering Controls:

Engineering controls such as an enclosure or local exhaust ventilation with dust collection must be used to maintain airborne contaminations levels below the exposure limits, where practicable.

Respiratory Protection:

Respirators must be NIOSH approved and properly selected, maintained and used when working with this product. Knowledge of respiratory hazards and respiratory protection is essential to ensure appropriate selection of respirators. Use an approved high efficiency NIOSH dust respirator with a minimum N95 rating.

Skin Protection:

Wear clothing to prevent contact with skin.

Eye and Face Protection:

Wear safety glasses to prevent contact with eyes and make immediately available appropriate emergency eye washing equipment (e.g. portable or plumbed) capable of flushing the eyes for at least 15 minutes.

9. Physical and Chemical Properties

Physical State	: Solid
Appearance	: Black
Odour	: None
Odour Threshold	: Not applicable
pH	: Not applicable
Vapour Pressure	: Not applicable
Solubility in water	: No
Vapour Density	: Not applicable
Melting Point	: Not applicable
Boiling Point	: Not applicable
Freezing Point	: Not applicable
Specific Gravity	: 1.6 – 1.7 (water =1)
Coefficient of Water/oil	: Not applicable
Distribution:	
Evaporation Rate	: Not applicable

10. Stability and Reactivity

Chemical Stability: This product is stable.

Hazardous Polymerization: Will not occur.

Incompatibility: Yes. Keep away from oxidizing materials

Reactivity: No

Hazardous Decomposition Products: None

11. Toxicological Information

Effects of Acute Exposure	: See Section 3
Effects of Chronic Exposure	: See Section 3
Irritancy	: Yes. See Section 3.
Skin Sensitization	: None reported
Respiratory Sensitization	: None reported
Neurotoxicity	: No
Carcinogenicity	: Crystalline silica is listed by IARC
Embryotoxicity	: No
Teratogenicity	: No
Reproductive Toxicity	: No
Mutagenicity	: No
Synergistic Products	: None reported

12. Ecological Information

Environmental Toxicity: No

Biodegradability: No

13. Disposal Considerations

Disposal by burning of coal may be controlled by some jurisdictions due to sulphur content. Review federal, provincial or state, and local government requirements prior to disposal.

14. Transport Information

Canadian Transportation of Dangerous Goods Regulations: Not regulated

International Air Transport Association (IATA): Not regulated

International Maritime Organization (IMO): Not regulated

15. Regulatory Information

CANADIAN FEDERAL REGULATIONS:

CEPA, DOMESTIC SUBSTANCES LIST: Listed

WHMIS CLASSIFICATION: Does not meet criteria