
1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Baked cathode blocks - with graphite.

PRODUCT NUMBER: 000073 (P5647)

SUPPLIER: Rio Tinto Alcan
 Primary Metal
 Cathodic Products Center
 P.O. Box 1500, bldg. 252
 Jonquière, Québec, Canada
 G7S 4L2

Emergency phone : 1-800-567-7455*
 Phone : 418-699-3652
 Fax : 418-699-2721

* Please call collect for outside calls of North America.

Synonyms: Bottom and sides of electrolytic cell.

APPEARANCE AND ODOUR: Black odourless solid.

USES: Electrode for aluminum electrolysis.

2. COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS #	LD ₅₀	LC ₅₀	CONC.
Calcined anthracite	68187-59-7	Unknown	Unknown	70 – 90%
Synthetic graphite	7782-42-5	Unknown	Unknown	20 – 30%
Pitch coke	-----	Unknown	Unknown	14 – 17%
Silica (quartz)	14808-60-7	Unknown	Unknown	< 1%

May contain trimmings (machine cuttings) : 10 – 30%

May contain recovered crushed cathode : 10 – 30%

Note : Trimmings and recovered crushed cathode have the same composition, as indicated above.

Contact the supplier to know if the blocks contain recovered crushed cathode.

3. HAZARDS IDENTIFICATION

As shipped, this product does not present hazard.

4. FIRST AID MEASURES

INHALATION: If overcome by high dust concentrations, remove to a ventilated area.

SKIN CONTACT: Wash skin thoroughly with soap and water. Do not cleanse skin too vigorously, since this may aggravate irritation.

EYE CONTACT: Flush eyes thoroughly with water, taking care to rinse under eyelids. If irritation persists, continue flushing for 15 minutes, rinsing from time to time under eyelids. If discomfort continues, consult a physician. Do not scrub, since the abrasion may cause irritation.

INGESTION: Not applicable

5. FIRE-FIGHTING MEASURES

Combustible.

Extinguishing media: Water mist, foam, carbon dioxide.

Wear appropriate protective clothing. Wear a self-contained breathing apparatus if necessary. Finely-divided, concentrated dust may ignite or explode when heated. Moderate fire hazard if exposed to heat, fire or strong oxidizing agents.

HAZARDOUS COMBUSTION PRODUCTS: Carbon oxides, sulfur and nitrogen oxides.

6. ACCIDENTAL RELEASE MEASURES

Recycle if possible. Avoid spreading dust.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Some tasks generate dust (cutting, dismantling). Avoid generating dust during handling. Ventilate adequately. If this is not possible, wear appropriate breathing apparatus.

STORAGE CONDITIONS: Store in a cool and well-ventilated area, away from oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Provide general and local ventilation to maintain concentrations of air contaminants below recommended standards. Eye protection (goggles) and respiratory protection (mask or full-face respirator against the concerned hazard) should be provided if excessive dust concentrations occur.

Exposure limits:

	ACGIH (TLV)		OSHA (PEL)	
	TWA	STEL	TWA	CEILING
Carbon (coal) dust (respirable) < 5% SiO ₂	None	None	2.4 mg/m ³	None
> 5% SiO ₂	None	None	10 mg/m ³ /(%SiO ₂ + 2)	None
Synthetic graphite (respirable dust)	2 mg/m ³	None	None	None
Coal dust (anthracite respirable fraction)	0.4 mg/m ³	None	None	None
Crystalline silica (quartz) -respirable dust	0.05 mg/m ³	None	(10 mg/m ³) / (%SiO ₂ + 2)	None
-total dust	None	None	(30 mg/m ³) / (%SiO ₂ + 2)	None

(ACGIH = American Conference of Governmental Industrial Hygienists; TLV = Threshold Limit Value; OSHA = Occupational Safety and Health Administration [USA]; PEL = Permissible Exposure Limit; TWA = Time-Weighted Average; STEL = Short Term Exposure Limit; Ceiling = Ceiling value)

9. PHYSICAL AND CHEMICAL PROPERTIES

PH:	Not applicable	FLASHPOINT:	Not applicable
BOILING POINT:	Not applicable	AUTOIGNITION TEMPERATURE:	Not applicable
MELTING POINT:	Not applicable	LOWER FLAMMABLE LIMIT:	Not applicable
VAPOUR PRESSURE:	Not applicable	HIGHER FLAMMABLE LIMIT:	Not applicable
VAPOUR DENSITY (AIR = 1):	Not applicable	EXPLOSIVE PROPERTIES:	Not applicable
EVAPORATION RATE:	Not applicable	NFPA FIRE CODE:	1
RELATIVE DENSITY (WATER = 1):	1.6	OXIDIZING PROPERTIES:	Not applicable
WATER SOLUBILITY:	Insoluble	PARTITION COEFFICIENT	Not applicable

ODOUR THRESHOLD: Not applicable **(N-OCTANOL/WATER):**

10. STABILITY AND REACTIVITY

STABLE (YES/NO): Oui

CONDITIONS AND MATERIAL TO AVOID: Reacts with strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: A thermo-oxidative degradation results in the emission of toxic gases of carbon, nitrogen and sulphur oxides.

11. TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE:

INHALATION:	Oui	INGESTION:	Non		
EYE CONTACT:	Non	SKIN CONTACT:	NON	SKIN ABSORPTION:	Non

ACUTE EFFECTS:

INHALATION: Inhalation of high concentrations of these inert nuisance particulates can result in mild irritation of the respiratory tract.

SKIN CONTACT: May cause irritation through mechanical abrasion.

EYE CONTACT: May cause irritation through mechanical abrasion.

INGESTION: Not applicable

CHRONIC EFFECTS:

Prolonged and repeated overexposure to dust can lead to a benign pneumoconiosis.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO THE PRODUCT: Respiratory diseases.

Carcinogenicity / Mutagenicity / Reproductive toxicity:

NTP identifies respirable crystalline silica as known human carcinogen. IARC classifies crystalline silica in the form of quartz or cristobalite as carcinogenic to humans Groupe 1.

(NTP = National Toxicology Program [USA] IARC = International Agency for Research on Cancer)

12. ECOLOGICAL INFORMATION

No effects are expected from this insoluble product because insolubility leads to non-bioavailability.

13. DISPOSAL CONSIDERATIONS

Recycle if possible. Dispose of waste in accordance with federal, state, or local regulations.

14. TRANSPORT INFORMATION

TDGR: not regulated CFR 49: not regulated IMO: not regulated ICAO: not regulated IATA: not regulated

[TDGR = Transport of Dangerous Good Regs.(Canada). CFR 49 = Code of Federal Regs.(USA). IMO = International Maritime Organization. ICAO = International Civil Aviation Organization. IATA = International Air Transport Association]

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION (CANADA):	D2A Very toxic material causing other toxic effects
EUROPEAN UNION CLASSIFICATION:	Not classified
WARNING SYMBOL:	None
WARNING WORD:	None
RISK PHRASES:	None
SAFETY PHRASES:	None

USA REGULATIONS :

Section 313 Supplier Notification

This product does not contain any chemicals in concentrations subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (Title III of SARA) and of 40 CFR 372.

16. OTHER INFORMATION

ABBREVIATIONS:

WHMIS = Working hazardous material information system. CAS number = Chemical Abstracts Service Registry Number.
LD₅₀ = Lethal dose 50%; LC₅₀ = Lethal concentration 50%; LCL₀ = Lowest published lethal concentration. EU = European Union.

*** Although the information in this SDS was obtained from sources which we believe to be reliable, it cannot be guaranteed. In addition, this information may be used in a manner beyond our knowledge or control. The information is therefore provided for advice purposes only, without any representation or warranty express or implied. ***

Prepared by Rio Tinto Alcan Toxicology Service
P.O. Box 1500, Jonquière (Quebec)
Canada, G7S 4L2

Phone: 418-699-2707
Fax: 418-699-2993
E-mail: servicetoxico@alcan.com

DATE OF THE PREVIOUS REVISION: 2005-05-03

REASON FOR REVISION: Modification in section 1.