



MATERIAL SAFETY DATA SHEET

SECTION I PRODUCT INFORMATION		
Product Name:	Blast Furnace Slag (Granulated)	
Material Type:	Blast Furnace By-product	
Product Use:	Cement Raw Material	
Manufacturer's Name & Address:	ESSAR Steel Algoma Inc. 105 West Street Sault Ste. Marie Ontario, Canada P6A 7B4	
Emergency Phone Numbers:	(705) 945-4058 (8:00 am - 4:00 pm) (705) 945-2271 (after hours)	Revision Date: August 4, 2010
WHMIS Class:	D ₂	
TDG Information:	NA	

SECTION II INGREDIENT LISTING					
			*TWAEV Ontario Regulation (833)	Toxicity	
Ingredient:	CAS. No.	%	(*PPM/mg/m ³)	LD50	LC50
Silicon Dioxide	7440-21-3	40	10 mg/m ³	7340 mg/kg	NA
Calcium Oxide	1305-78-8	38	2 mg/m ³	1421 mg/kg	NA
Magnesium Oxide	1309-48-4	11	10 mg/m ³	NA	NA
Aluminum Oxide	1344-28-1	8	10 mg/m ³	NA	NA
Sulphur	7704-34-9	1	-	NA	NA
Barium	7440-39-3	1	-	630 mg/kg	NA
Manganese Oxide	7439-96-5	0.6	0.2 mg/m ³	3040 mg/kg	NA
Iron Oxide	1309-37-1	0.6	5 mg/m ³	30000 mg/kg	NA

* TWAEV = Time Weighted Average Exposure Value

*PPM = Parts Per Million

*mg/m³ = Milligrams Per Cubic Metre



SECTION III PHYSICAL DATA			
Physical State:	Solid	PH:	N/A
Boiling Point: (°C)	N/A	Specific Gravity(H₂O =1):	U
Melting Point: (°C)	N/A	% Volatile by Volume:	N/A
Vapour Pressure: (mmHg)	N/A	Evaporation Rate:	N/A
Vapour Density: (Air =1)	N/A	Appearance & Odour:	Glassy solid Slight sulphur odour
Solubility in H₂O:	Insoluble	Coefficient Water/Oil Distribution	N/A

SECTION IV FIRE AND EXPLOSION HAZARD DATA						
Flammable:	YES:		NO:	X	Flash Point: (°C) Closed Cup:	N/A
Flammable Limits:	LEL:	N/A	UEL:	N/A		
Extinguishing Media:	N/A					
Susceptibility to Mechanical Impact: or Static Discharge:	N/A					
Fire Fighting Procedures:	N/A					

SECTION V REACTIVITY DATA	
Stability:	Stable
Incompatible Materials:	Strong acids or oxidizers
Decomposition Products:	Oxides of sulphur and oxygen

SECTION VI TOXICOLOGICAL INFORMATION	
Acute Effects:	May cause abrasive irritation to skin or eyes. Burning material may generate sulphur dioxide gas. Prolonged exposure to dust may cause upper respiratory irritation.
Chronic Effects:	Prolonged exposure to sulphur dioxide gas or dust from product may cause upper respiratory irritation or lung damage.



SECTION VII FIRST AID MEASURES	
Inhalation:	Remove to fresh air.
Skin Contact:	Wash contaminated skin with soap and water.
Eye Contact:	Flush eyes with water for 15 minutes. Seek medical aid if irritation persists.
Ingestion:	Do not take internally. Seek medical aid if irritation persists.

SECTION VIII PREVENTIVE MEASURES	
Respiratory Protection:	Use a NIOSH approved respirator for dusty conditions or if product is burning.
Protective Gloves/Clothing:	Cotton or impervious gloves as required.
Eye Protection:	Safety glasses or monogoggles for dusty conditions.
Ventilation:	Use adequate ventilation to avoid overexposure to dust.
Spill Cleanup:	Avoid generation of dust. Scoop up or wet sweep material and place in Container for reuse or disposal.
Waste Disposal:	Dispose of according to applicable environmental legislation.
Handling/Storage:	No special storage or handling requirements.

SECTION IX SPECIAL PRECAUTIONS
May contain trace amounts of crystalline silica, which has been listed by I.A.R.C. and the A.C.G.I.H. as a suspected human carcinogen.

SECTION X PREPARATION INFORMATION	
Prepared by: ESSAR Steel Algoma Inc. Occupational Health and Safety Department	MSDS Inquiries Phone: (705) 945-4058

U = Unknown

N/A = Not applicable