

## **Material Safety Data Sheet**

WHMIS	Protective Clothing	TDG Road/Rail

Section I - Product Identification and Uses		
Common/Trade Name	Coke / foundry coke/ Metallurgical coke	MSDS # 9941
Synonyms	Coke, Buckwheat Coke, Nut Coke, Pea Coke, Blast Furnace Coke, Dry Coke Fines, Coke Breeze	
Chemical Name	Not applicable	
Chemical Formula	Not applicable	
Chemical Family	Not available	
Supplier	JH CARBON LIMITED FLAT/RM 1502 EASEY COMMERCIAL BUILDING 253-261 HENNESSY ROAD WANCHAI, HONGKONG, CHINA TEL: 00852-30697751 FAX:00852-30697752	
Material Uses	Carbon/fuel source for metal production. Internally generated by-product material.	

Section IA - Fi	rst aid measures
Eye Contact	Flush eyes with water to remove foreign body. Seek medical attention if irritation persists.
Skin Contact	Wash with soap and water to remove from skin. Seek medical attention if irritation persists.
Inhalation	Remove person to fresh air. Seek medical attention if symptoms persist.
Ingestion	Not applicable.

Section II - Composition and Information on Ingredients				
Name	CAS#	% by Weight	TLV/PEL	$LC_{50}/LD_{50}$
1. CARBON	7440-44-0	86-91	TWA: 3.5 (mg/m³) from ACGIH (TLV)	Not available.
2. WATER	7732-18-5	3-29	Not available.	Not available.
3. QUARTZ	14808-60-7	<1	TWA: 0.05 (mg/m <sup>3</sup> ) from ONT. MOL	ORAL (LD50): Acute: 90 mg/kg [Rat]. >15000 mg/kg [Mouse].
4. SULPHUR	7704-34-9	0.6-0.8	TWA: 10 (mg/m³) from ACGIH (TLV) (PNOS– Inhalable; 3 (mg/m³) from ACGIH (TLV) (PNOS- Respirable)	Not available.
5. SODIUM MONOXIDE	12401-86-4	0.01-0.7	Not available.	Not available.
6. CALCIUM OXIDE	1305-78-8	0.01-0.3	TWA: 2 (mg/m³) from ACGIH (TLV)	Not available.
7. MAGNESIUM OXIDE	1309-48-4	0.01-0.3	TWA: 10 (mg/m³) from ACGIH (TLV)	ORAL (LD50): Acute: 810 mg/kg [Mouse
8. POTASSIUM OXIDE	12136-45-7	0.01-0.2	Not available.	Not available.
9. TITANIUM DIOXIDE	13463-67-7	0.01-0.2	TWA: 10 (mg/m³) from ACGIH (TLV)	ORAL (LD50): Acute: 10000 mg/kg [Rat]. VAPOR (LC50): Acute: 2087 ppm 4 hour(s) [Rat].
10. ALUMINA	1344-28-1	0.2-3	PNOS – see Sulphur	Not available.
11. IRON OXIDE	1332-37-2	0-2	TWA: 5 (mg/m³) from ACGIH (TLV)	Not available.
12. PHOSPHOROUS PENTOXIDE	1314-56-3	0-0.10	Not available.	GAS (LC50): Acute: 104.8 ppm 4 hour(s) [Rat].
13. MANGANESE OXIDE	1317-35-7	0-0.02	TWA: 0.2 (mg/m³) from ACGIH (TLV)	Not available.

Section III - Toxic	Section III - Toxicological Properties			
Routes of entry	Skin contact. Eye contact. Inhalation.			
TLV	Permissible exposure limits have not been established for this product.			
Toxicity for animals	Acute oral toxicity (LD50): 440 mg/kg [Mouse]. (CARBON)			
Chronic effects on humans	Long-term inhalation overexposure may cause lung disorders. IARC has classified Crystalline Silica as a Class 1 carcinogen. Their study concluded that sufficient evidence for carcinogenicity exists in experimental animals and that sufficient evidence exists in humans for the carcinogenicity of inhaled crystalline silica in the forms of quartz or cristoballite from occupational sources.			
Acute effects on humans	Overexposure by inhalation may cause irritation of nose, throat and mucous membranes.  Abrasive irritation of skin or eyes.			

Section IV - Physical Data			
Physical State and Appearance	Solid (solid lumps).	Vapor Pressure	Not applicable.
pН	Not applicable.	<b>Evaporation Rate</b>	Not applicable.
Odor Threshold	Not applicable.	Viscosity	Not applicable.
Volatility	Not applicable.	Water/Oil Dist. Coeff.	Not applicable.
Melting/Sublimation Point	Not applicable.	Critical temperature	Not applicable.
<b>Boiling/Condensation Point</b>	Not applicable.	Instability temperature	Not applicable.
Specific Gravity	1.75 (Water = 1)	Conditions of instability	No additional remark.
Vapor Density	Not available.	Solubility	Not available.
Dispersion Properties	See solubility in water.	Odor	No characteristic odour.
		Color	Black.

Section V – Fire and Explosion Data			
The product is	Will burn at elevated temperatures.		
Auto-ignition temperature	Not applicable.		
Fire degradation products	Combustion products such as carbon oxides.		
Flash Points	Not applicable.		
Flammable Limits	Not applicable.		
Fire Extinguishing Procedures	Use water. Use SCBA during fire fighting.		
Flammability	Will burn at elevated temperatures.		
Risks of explosion	Risks of explosion of the product in presence of mechanical impact: No. Risks of explosion of the product in presence of static discharge: No No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.		

Section VI – Reactivity Data		
The product is stable.		
Oxides of carbon.		
Not applicable.		
Possibly hazardous short term degradation products are not likely.		
No specific information is available in our database regarding the corrosivity of this product in presence of various materials.		
No specific information is available in our database regarding the reactivity of this material in presence of various other materials.		

Section VII – Preventive Measures		
Waste Information	Dispose of in accordance with local, provincial and federal regulations.	
Storage	Not applicable.	
Precaution	Avoid dust generation during handling. Do not breathe dust or fume. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment.	
	This material contains a small amount (0.1-0.9% by weight) of quartz (free crystalline silica). Free crystalline silica is listed by IARC as a group 1 "proven human carcinogen". This material does not contain any components listed under SARA 313.	
Small spill and leak	Contain spill, reclaim spilled material to suitable container. Use appropriate personal protective equipment during clean-up.	
Large spill and leak	If spills may impact the natural environment (e.g. entering to storm sewer, bay, waterway, etc.) contact your Environment department.	

Section VIII - Pr	otective Measures	
Protective Clothing	Safety glasses with side shields. Leather faced gloves. Use NIOSH/MSHA approved respirator.	
<b>Engineering Controls</b>	Use general ventilation under normal conditions. Use media is generated.	hanical ventilation if dust or fume

Section IX - Class	ification	
TDG Road/Rail	Not controlled under TDG (Canada).	
Maritime Transportation	Not available.	
WHMIS	WHMIS CLASS D-2A: Material causing other toxic effects (VERY TOXIC).	1
Federal and Provincial	CEPA DSL: CALCIUM OXIDE; MAGNESIUM OXIDE;	
Regulations	PHOSPHORUS OXIDE; MANGANESE OXIDE; IRON OXIDE;	
	SULPHUR; POTASSIUM OXIDE; SODIUM MONOXIDE;	
	TITANIUM DIOXIDE; QUARTZ	

	THANION DIONIDE, QUARTZ		
Section X – O	Section X – Other Information		
References	Dofasco's Material Safety Data Sheet		
If the use of this material is other than that specified by the supplier, additional precautions may be required.			
		Effective Date: May 30, 2019	
<b>EMERGENCY C</b>	ONTACT: +86-138-7103-4343		

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