

8. Exposure controls/personal protection

Occupational exposure limits

U.S. - OSHA

Components	Type	Value	Form
Calcined petroleum coke (CAS 64743-05-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Cellulose (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Graphite (CAS 7782-42-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Magnesium oxide (CAS 1309-48-4)	PEL	15 mg/m3	Total particulate.
		15 mg/m3	Total particulate.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
Graphite (CAS 7782-42-5)	TWA	15 mppcf	Respirable fraction.
		5 mg/m3	
Magnesium oxide (CAS 1309-48-4)	TWA	15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
		5 mg/m3	Respirable fraction.
Mullite (CAS 1302-93-8)	TWA	15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.
		5 mg/m3	Respirable fraction.

ACGIH

Components	Type	Value	Form
Calcined petroleum coke (CAS 64743-05-1)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	5 mg/m3	Inhalable fraction.
Cellulose (CAS 9004-34-6)	TWA	10 mg/m3	Respirable fraction.
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	
Magnesium oxide (CAS 1309-48-4)	TWA	10 mg/m3	Inhalable fraction.
Mullite (CAS 1302-93-8)	TWA	1 mg/m3	Respirable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Barium sulphate (CAS 7727-43-7)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Cellulose (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
		10 mg/m3	Total
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m3	Respirable.

Biological limit values

No biological exposure limits noted for the ingredient(s).