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Barium nitrate (as Ba)					
Synonyms & Trade Names Barium dinitrate, Barium(II) nitrate (1:2), Barium salt of nitric acid					
CAS No. 10022-31-8	RTECS No. CQ9625000		DOT ID & Guide 1446 141		
Formula Ba(NO ₃) ₂	Conversion		IDLH 50 mg/m ³ (as Ba) See: IDLH INDEX		
Exposure Limits NIOSH REL *: TWA 0.5 mg/m ³ [*Note: The REL also applies to other soluble barium compounds (as Ba) except Barium sulfate.] OSHA PEL *: TWA 0.5 mg/m ³ [*Note: The PEL also applies to other soluble barium compounds (as Ba) except Barium sulfate.]			Measurement Methods NIOSH 7056 ; OSHA ID121 See: NMAM or OSHA Methods		
Physical Description White, odorless solid.					
MW: 261.4	BP: Decomposes	MLT: 1094°F	Sol: 9%	VP: Low	IP: ?
Sp.Gr: 3.24	FLP: NA	UEL: NA	LEL: NA		
Noncombustible Solid, but will accelerate the burning of combustible materials.					
Incompatibilities & Reactivities Acids, oxidizers, aluminum-magnesium alloys, (barium dioxide + zinc) [Note: Contact with combustible material may cause fire.]					
Exposure Routes inhalation, ingestion, skin and/or eye contact					
Symptoms irritation eyes, skin, upper respiratory system; skin burns; gastroenteritis; muscle spasm; slow pulse, extrasystoles; hypokalemia					
Target Organs Eyes, skin, respiratory system, heart, central nervous system					
Personal Protection/Sanitation (See protection codes)				First Aid (See	

Skin: Prevent skin contact
Eyes: Prevent eye contact
Wash skin: When contaminated
Remove: When wet or contaminated
Change: Daily

procedures)
Eye: Irrigate immediately
Skin: Water flush immediately
Breathing: Respiratory support
Swallow: Medical attention immediately

Respirator Recommendations

NIOSH/OSHA

Up to 5 mg/m³:

(APF = 10) Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100, P100.

[Click here for information on selection of N, R, or P filters.](#)

(APF = 10) Any supplied-air respirator

Up to 12.5 mg/m³:

(APF = 25) Any supplied-air respirator operated in a continuous-flow mode

(APF = 25) Any powered, air-purifying respirator with a high-efficiency particulate filter.

Up to 25 mg/m³:

(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.

[Click here for information on selection of N, R, or P filters.](#)

(APF = 50) Any supplied-air respirator that has a tight-fitting facepiece and is operated in a continuous-flow mode

(APF = 50) Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter

(APF = 50) Any self-contained breathing apparatus with a full facepiece

(APF = 50) Any supplied-air respirator with a full facepiece

Up to 50 mg/m³:

(APF = 2000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

Emergency or planned entry into unknown concentrations or IDLH conditions:

(APF = 10,000) Any self-contained breathing apparatus that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode

(APF = 10,000) Any supplied-air respirator that has a full facepiece and is operated in a pressure-demand or other positive-pressure mode in combination with an auxiliary self-contained positive-pressure breathing apparatus

Escape:

(APF = 50) Any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter.

[Click here for information on selection of N, R, or P filters.](#)

Any appropriate escape-type, self-contained breathing apparatus

Important additional information about respirator selection**See also: INTRODUCTION See ICSC CARD: 1480**

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