

Coalite™ / Gelcoalite™ Z

Description

Coalite™ and Gelcoalite™ Z products are packaged, detonator sensitive permissible dynamites.

Application

Coalite™ and Gelcoalite™ Z are formulated to meet the rigid MSHA requirements for use in underground coal and gaseous mines, while producing a desired breaking action for proper sizing and fewer fines.

Technical Properties

		Coalite™	Gelcoalite™ Z
Cartridge Density (g/cc)		1.21	1.34
Typical Velocity of Detonation ¹		2,500 m/s 8,200 ft/s	5,000 m/s 16,400 ft/s
Water Resistance		Fair	Excellent
MSHA		Permissible	
Relative Effective Energy (REE) ²	Relative Weight Strength (RWS)	96	100
	Relative Bulk Strength (RBS)	140	159

Packaging

Coalite™ and Gelcoalite Z™ are packaged in convolute paper. Standard cartridge sizes are as follows:

Coalite™			Gelcoalite Z™		
Size		Cartridges / Case	Size		Cartridges /Case
mm	in.		mm	in.	
32 x 400	1¼ x 16	44	32 x 200	1¼ x 8	88
			32 x 400	1¼ x 16	44

Recommendations for Use

Priming and Initiation

Permissible products must be primed with a permissible electric detonator, such as *ElectricCOAL™* detonators.

Storage And Handling

Product Classification

Authorized Name: Coalite™ 8S-U
 Shipping Name: Explosive, Blasting, Type A
 UN No: 0081
 Class Code: 1.1D
 EX Number: 9402294

Authorized Name: Gelcoalite™ Z
 Shipping Name: Explosive, Blasting, Type A
 UN No: 0081
 Class Code: 1.1D
 EX Number: 9406054

All regulations pertaining to the handling and use of such explosives apply.

Storage

The **shelf life** is 12 months from date of manufacture when stored under moderate temperatures and dry conditions in a cool, dry, and well ventilated approved explosives magazine. Dynamite that is stored under warm, wet, and/or humid conditions can deteriorate quickly, minimizing shelf life. Dynamite inventories should always be rotated, by using the oldest materials first.

Store under moderate temperatures recommended by a technical service representative. Store under dry conditions in a well ventilated magazine that has been approved for either detonator storage or explosive storage. **DO NOT** store explosives in a detonator magazine or detonators in an explosive magazine. Keep containers closed. Explosives should be kept well away from initiating explosives; protected from physical damage; separated from oxidizing materials, combustibles, and sources of heat. Keep away from incompatibles.

Storage Temperature: Ideal storage temperature is 10-27°C (50-80°F). Do not expose sealed containers to temperatures above 40°C (104°F).

Coalite™ / Gelcoalite™ Z

For recommended good practices in transporting, storing, handling, and using this product, refer to the "Always and Never" booklet packed inside each case.

Transport

Coalite™ and *Gelcoalite™ Z* should be transported between -40°C (-40°F) and +40°C (104°F).

Disposal

Disposal of explosives materials can be hazardous. Methods for safe disposal of explosives may vary depending on the user's situation. Please contact a local Orica representative for information on safe practices.

Safety

The post detonation fume characteristics of *Coalite™* and *Gelcoalite™ Z* make the product suitable for both underground and surface blasting applications. Users should ensure that adequate ventilation and gas monitoring is provided prior to re-entry into the blast area.

Coalite™ and *Gelcoalite™ Z* can be initiated by extremes of shock, friction or mechanical impact. As with all explosives, *Coalite™* and *Gelcoalite™ Z* should be handled and stored with care and must be kept clear of flame and excessive heat.

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Emergency Contact Telephone Numbers

For chemical emergencies (24 hour) involving transportation, spill, leak, release, fire or accidents:

Canada: Orica Canada emergency response **1-877-561-3636**

USA: Chemtrec **1-800- 424-9300**

For lost, stolen or misplaced explosives:

USA: BAFT **1-800-800-3855**. Form ATF F5400.0 must be completed and local authorities (state / municipal police, etc) must be advised.

Notes

1. Unconfined at 5°C (41°F). VOD will depend on application including explosive density, blasthole diameter, and degree of confinement. The VOD range is based on minimum unconfined and calculated ideal.
2. The Relative Effective Energy (REE) of an explosive is the energy calculated to be available to do effective blasting work. All energy values are calculated using the *IDeX™* computer code owned by Orica for the exclusive use of its

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companies. Energy values are based on standard ANFO with a density of 0.84 g/cc and a cut-off pressure of 100Mpa. Other computer codes may give different values.