



## Permissible Ammonium Nitrate Nitroglycerin Dynamite



### Product Description

RED HA is an ammonium nitrate dynamite formulated to meet the requirements of the Mine Safety and Health Administration for use in underground coal mines and is intended for use in shooting coal “off-the-solid” and coal seams which contain rock binders. Density, detonating velocity and energy provide consistent results in coal seams that are difficult to shoot.

### Application Recommendations

- This product is permissible only if used in accordance with the Code of Federal Regulations, 30 CFR part 75. These regulations are very detailed and all users should become fully familiar with their content.
- Minimum detonator for permissible application is a bronze shell No. 8 strength.
- Dynamites are susceptible to sympathetic detonation when applied in very wet conditions where boreholes are closely spaced and/or where geological conditions promote this effect. Consult your Dyno Nobel representative for recommendations where these conditions exist.

## Properties

MSDS  
#1019

Density (g/cc) Avg	1.21
Energy <sup>a</sup> (cal/g)	844
(cal/cc)	1,021
Relative Weight Strength <sup>a</sup>	0.96
Relative Bulk Strength <sup>a,b</sup>	1.41
Velocity <sup>c</sup> (m/s)	2,500
(ft/s)	8,200
Detonation Pressure <sup>c</sup> (Kbars)	19
Gas Volume <sup>a</sup> (moles/kg)	37
Water Resistance	Fair
Fume Class	MSHA Permissible

<sup>a</sup> All Dyno Nobel Inc. energy and gas volume values are calculated using PRODET™ the computer code developed by Dyno Nobel Inc. for its exclusive use. Other computer codes may give different values.

<sup>b</sup> ANFO = 1.00 @ 0.82 g/cc

<sup>c</sup> Unconfined @ 32 mm (1¼ in) diameter

### Hazardous Shipping Description

Explosive, Blasting, Type A, 1.1D, UN 0081 II





### Transportation, Storage and Handling

- RED HA must be transported, stored, handled and used in conformity with all applicable federal, state, provincial and local laws and regulations.
- For maximum shelf-life, dynamite must be stored in cool, dry and well-ventilated magazines. Dynamite inventory should always be rotated by using the oldest materials first. For recommended good practices in transporting, storing, handling and using this product, see the booklet "Prevention of Accidents in the Use of Explosive Materials" packed inside each case and the Safety Library Publications of the Institute of Makers of Explosives.

Diameter x Length		Qty / Case	Case Type	Nominal Case Weight	
mm	in			kg	lbs
32 x 200	1 1/4 x 8	88	DA	20	45

\*\*Available upon request.

- RED HA is available in a wide variety of sizes. Custom sizes are subject to surcharge and may require longer than usual lead times.
- Note: All weights are approximate.
- Check with your Dyno Nobel representative should you have any questions.

### Case Dimensions

DA 45 x 34 x 17 cm 17<sup>3</sup>/<sub>4</sub> x 13<sup>3</sup>/<sub>8</sub> x 6<sup>3</sup>/<sub>8</sub> in

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