

# Technical Data Sheet

## Kinepak™



### Description

*Kinepak™* and *Kinepouch™* are binary products that are not an explosive until it is mixed. The solid component is an oxidizer and the liquid component is a flammable liquid. These products can be transported and stored under the "Limited Quantity" designation so they can be used in applications where explosives cannot.

### Application

*Kinepak™* can be used as a booster or a column charge in a variety of applications such as furnace de-slag applications, secondary blasting, bomb disposal, trenching, and shearing of oil well casings or drill pipe.

### Key Benefits

- *Kinepak™* creates an excellent booster that will reliably initiate most blasting agents, both bulk and cartridges.
- When using *Kinepak™* in combination with blasting agents, there are more storage options (table of distance), ease in transportation requirements and elimination of the costs associated with transporting high explosives.
- *Kinepak™* can provide additional security when desired. Although they can be stored together, the user also has the option to lock them in separate storage facilities.
- *Kinepak™* produces high velocities and high detonation pressures when detonated.
- *Kinepak™* can be shipped to you via common carrier or UPS.
- OH&S issues around the handling and storage of nitroglycerine are eliminated.

### Packaging

*Kinepak™* is available in a number of packaging options based on your application.

**Kinepak™ is available in the following sizes:**

Kinepak™ and Kinepouch™				
Product	Dimension (in.)	Weight/unit (lb.)	Packaging	Units/Case
1/3S	1 ¼ x 7	1/3	Solid	96
1/2S	1 ⅜ x 8	½	Solid	75
1BB	2 ½ x 5	1	Solid	50
1S	2 x 9	1	Solid	48
1P	1 - 1 ½ x 4 ½ x 5	1	Pouch	48

### Technical Properties

Kinepak™ and Kinepouch™ (Mixed)			
Cartridge Density			1.20 g/cc
Maximum Velocity of Detonation <sup>1</sup>			6,300 m/s 20,700 ft/s
Water Resistance			Excellent
Relative Effective Energy REE) <sup>2</sup>	Absolute Weight Strength (AWS)		992 cal/g
	Relative Bulk Strength (RBS)		160

### Recommendations for Use

#### Priming and Initiation

*Kinepak™* can be reliably detonated with a high strength detonator or *Cordtex™* XLT 48 gr/ft cord. If special conditions exist, please consult your SEC Technical Representative for assistance.

#### Mixing Instructions

1. Attach arming needle to Liquid Tube.
2. Insert arming needle into solid component and dispense liquid.
3. Attach high strength detonator or *Cordtex™* XLT 48 gr/ft cord.



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### Storage And Handling

#### Product Classification

Authorized Names:	<i>Kinepak™</i> (Solid Component)
Shipping Name:	Oxidizer (limited quantity <sup>3</sup> )
UN No:	1942, PGIII
Class Code:	5.1
Authorized Names:	<i>Kinepak™</i> (Liquid Component)
Shipping Name:	Flammable Liquid (limited quantity <sup>3</sup> )
UN No:	1261, PGII
Class Code:	3

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

#### Storage

*Kinepak™* is not considered an explosive until mixed so magazine storage is not required. Although, users must recognize that these products are precursors to explosives and the individual components must be stored in a safe and secure location.

To maximize shelf life, both the *Kinepak™* liquid and sold must be stored in a cool, dry and well-ventilated environment. *Kinepak™* that is stored under, warm, wet and/or humid conditions can deteriorate quicker, minimizing shelf life. All inventories should always be rotated, by using the oldest materials first.

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

#### Transport

*Kinepak™* can be transported and stored under the "Limited Quantity" designation<sup>3</sup>. This designation as defined in 49CFR means the product does not have to be stored nor transported as an explosive. Magazine, placards and special storage facilities are not required for *Kinepak™*.

#### Disposal

Disposal of explosives materials can be hazardous. Methods for safe disposal of explosives may vary depending on the user's situation. Please contact an SEC Technical Representative for information on safe practices.

### Safety<sup>4</sup>

**Drop Test:** No explosions, partials or burns occurred when a 30 lb. (13.6 kg) steel weight was dropped upon a sample from 10 ft (3 m).

**Bullet Impact Sensitivity:** No detonations occurred when 0.22 caliber and 0.30 caliber projectiles were fired into samples, backed with steel plates, at 50 (15.2 m) and 100 feet (30.5 m). The 0.30 caliber projectiles impacted with approximately 2,100 ft/second (360 m/s) velocity.

**Burn Test:** In all fire tests, unconfined *Kinepak™* explosives burned with supported combustion, no detonations.

*Kinepak™* can be initiated by extremes of shock, friction or mechanical impact. *Kinepak™* must be handled and stored with care and must be kept clear of flame and excessive heat.

### Trademarks

*Kinepak™* and *Kinepouch™* is a trademark of Hallowell Manufacturing LLC. 3600 NW 74<sup>th</sup> St, Columbus, KS 66725-0348. *Pentex™* is a trademark of Orica Explosives Technology Pty Ltd. ACN 075 659 353, 1 Nicholson Street, East Melbourne, VIC, Australia.

### Disclaimer

The information contained herein is based on experience and is believed to be accurate and up to date as at the date of its preparation. However, uses and conditions of use are not within the manufacturer's control and users should determine the suitability of such products and methods of use for their purposes. Neither the manufacturer nor the seller makes any warranty of any kind, express or implied, statutory or otherwise, except that the products described herein shall conform to the manufacturer's or seller's specifications. The manufacturer and the seller expressly disclaim all other warranties, INCLUDING, WITHOUT LIMITATION, WARRANTIES CONCERNING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Under no circumstances shall the manufacturer or the seller be liable for indirect, special, consequential, or incidental damages without limitation, damages for lost or anticipated profits. Explosives based on Ammonium Nitrate such as *Kinepak™* may react with pyritic materials in the ground and create potentially hazardous situations. Hallowell Manufacturing LLC. accepts no responsibility for any loss or liability arising from use of the product in ground containing pyritic or other reactive material.

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Hallowell Manufacturing LLC.  
3600 NW 74<sup>th</sup> Street  
Columbus, KS 66725-0348

### Emergency Contact Telephone Numbers

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

**Canada:** Hallowell Manufacturing LLC. Canada emergency response **1-877-561-3636**

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

For lost, stolen or misplaced explosives:

**USA:** BATFE **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 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.
3. The limited quantity designation exempts these products from labelling requirements (49 CFR Sec. 173.150 and 173.152)
4. These test were conducted under controlled conditions to test the safety of the products. Users should recognize that these products are still explosives and must be handled and treated as explosives.

### To place orders

Please contact Lisa Reed  
Phone: (888) 668-1660  
Email: [lisa.reed@orica.com](mailto:lisa.reed@orica.com)

### All other questions

Please contact Robert Onstott  
Phone: (208)-867-9337  
Email: [robert.onstott@orica.com](mailto:robert.onstott@orica.com)