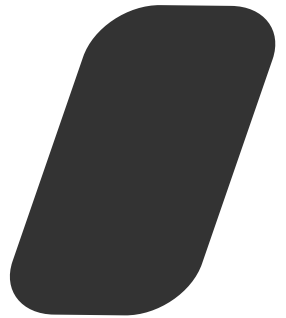




**ELTEK**

HELLENIC EXPLOSIVES TECHNOLOGY



**PRODUCTS  
INFORMATION  
& TECHNICAL  
SPECIFICATIONS**



# HYDRA 6000

**Explogel HYDRA 6000** is a special high-performance cap-sensitive emulsion explosive and safe-to-use. This emulsion explosive is the **flagship emulsion of the Explogel series**, which combines extremely high detonation speed and unrivalled high energy during firing.

For this reason, it is the appropriate choice for any type of project, which has very high explosive performance requirements.

**It is the top choice to replace the use of gelatine dynamite, with excellent results.**

## USAGE

- It is used in both underground and surface projects, where special needs must be met, such as mines or quarries of resistant rocks, the crushing of which requires high energy.
- Contains aluminium powder to enhance the energy and performance of the explosive.
- During the process of filling the horizontal boreholes with Explogel HYDRA 6000, it is recommended to slightly cut the packaging film to achieve optimal filling. It is also recommended to press the last cartridges in the bore with a tamping rod.
- It is initiated by detonator of min 0,6g PETN (or similar charge).
- Not suitable for mines with a risk of fire or explosion of coal dust and where flammable gases may be present.

## ADVANTAGES

- Suitable for very hard rocks.
- Easy sinking into boreholes containing water/mud.
- Excellent water resistance.
- Excellent performance in any type of project, underground or surface.
- Low content of produced toxic gases.
- Reduced face approach time after detonation.
- Produces a large amount of energy.
- Excellent safety against friction and impact
- Easy handling.



## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	1,22
Oxygen Balance %	-1,90
Gas Volume (L/kg)	940
Heat of explosion (kJ/kg)	4.466
Relative effective Energy (%)***	
Relative weight strength RWS % ***	141
Relative bulk strength RBS % ***	170
Detonation velocity (m/s)*	6.200 ± 200
Sensitivity (cm)**	≥6,50

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*Shot distance (diameter 38mm).

\*\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg.

\*\*\*\* All above values are theoretical, based on ideal detonation circumstances.

## SHELF LIFE

12 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in temperature range between -0 °C and 40 °C. Explogel HYDRA 6000 should be stored in explosives magazines class 1.1D, according to legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: Explogel HYDRA 6000  
Shipping name: Explosives, Blasting, Type E  
UN No: 0241  
Class of Danger: 1.1D

## PACKAGING

Cartridge (mm) Diameter x length	Cartridge weight (gr)	Pieces per carton box	Carton box weight NEQ (kg)
32x440	410	61	25
38x380	500	50	25
60x490	1665	12	20
70x540	2500	10	25
80x510	3125	8	25
90x540	4166	6	25

# EXPLO gel 200

**Explogel 200** is a high-performance, safe-to-use, cap-sensitive emulsion explosive. This emulsion explosive combines great detonation speed and high energy during firing, making it an ideal choice for any application.

## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	1,15 ±0,05
Oxygen Balance %	-0,30
Gas Volume (L/kg)	936
Heat of explosion (kJ/kg)	3.709
Relative effective Energy (%)***	
Relative weight strength RWS % ***	118
Relative bulk strength RBS % ***	141
Detonation velocity (m/s)*	5.800 ± 200
Sensitivity (cm)**	≥5

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*Shot distance (diameter 38mm)

\*\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg

\*\*\*\* All above values are theoretical, based on ideal detonation circumstances.



## SHELF LIFE

12 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in temperature range between -0 °C and 30 °C. Explogel 200 should be stored in explosives magazines class 1.1D, according to legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: Explogel 200

Shipping name: Explosives, Blasting, Type E

UN No: 0241

Class of Danger: 1.1D

## PACKAGING

Cartridge (mm) Diameter x length	Cartridge weight (gr)	Pieces per carton box	Carton box weight NEQ (kg)
25x350	200	125	25
28x410	300	84	25,2
32x440	410	61	25
38x380	500	50	25
60x490	1665	12	20
70x540	2500	10	25
80x510	3125	8	25
90x540	4166	6	25

## USAGE

- It is suitable and certified for underground use, mines, road tunnels and other projects where high efficiency explosives are required.
- Can be successfully used in all rock types and very demanding mining operations.
- Contains aluminium powder to enhance the energy and performance of the explosive.
- During the process of filling the horizontal boreholes with Explogel 200, it is recommended to slightly cut the packaging film to achieve optimal filling. It is also recommended to press the last cartridges in the bore with a tamping rod.
- Minimum critical diameter is 25mm.
- It is initiated by detonator of min 0,7g PETN (or similar charge) and by detonating cord.
- Not suitable for mines with a risk of fire or explosion of coal dust and where flammable gases may be present.

## ADVANTAGES

- Excellent water resistance.
- Excellent performance in any type of project, underground or surface.
- Low content of produced toxic gases.
- Reduced face approach time after detonation.
- Produces a very high volume of gas.
- Excellent safety against friction and impact.
- Easy handling.



# EXPLO gel 100

**Explogel 100** is a cap-sensitive emulsion explosive. It can also be used as a booster for less sensitive explosives such as Explo ANFO and Explogel 750S.



## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	1,15 ±0,05
Oxygen Balance %	-0,7
Gas Volume (L/kg)	923
Heat of explosion (kJ/kg)	3.232
Relative effective Energy (%)***	
Relative weight strength RWS % ***	110
Relative bulk strength RBS % ***	130
Detonation velocity (m/s)*	5.300 ± 200
Sensitivity (cm)**	≥3

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*Shot distance (diameter 50mm).

\*\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg.

\*\*\*\* All above values are theoretical, based on ideal detonation circumstances.

## USAGE

- Suitable for use in quarries, surface applications, road and other constructions, where use of explosives is required.
- Minimum critical diameter is 25mm.
- It is initiated by detonator of min 0,7g PETN (or similar charge) and by detonating cord.
- Not suitable for mines with a risk of fire or explosion of coal dust and where flammable gases may be present.

## ADVANTAGES

- Very resistant to water.
- Excellent performance in surface operations.
- Very low release of toxic fumes.
- Produces great gas volume.
- Excellent safety against mechanical impact and friction.
- Easy loading.

## SHELF LIFE

12 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in temperature range between -0 °C and 30 °C. Explogel 100 should be stored in explosives magazines class 1.1D, according to legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: Explogel 100

Shipping name: Explosives, Blasting, Type E

UN No: 0241

Class of Danger: 1.1D

## PACKAGING

Cartridge (mm) Diameter x length	Cartridge weight (gr)	Pieces per carton box	Carton box weight NEQ (kg)
25x350	200	125	25
28x410	300	84	25,2
32x440	410	61	25
38x380	500	50	25
60x490	1665	12	20
70x540	2500	10	25
80x510	3125	8	25
90x540	4166	6	25



# EXPLO gel 750S

(Booster Sensitive)

**Explogel 750S** is a general purpose, booster-sensitive emulsion explosive, commonly used in large diameter water containing holes.

Its high density allows it to sink into boreholes containing suspensions in water (mud).

It releases a large amount of energy and produces large quantities of aggregates satisfactorily crushed into soft and fragmented rocks, achieving low mining costs.

## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	1,25 ±0,05
Oxygen Balance %	-1
Gas Volume (L/kg)	950
Heat of explosion (kJ/kg)	2.720
Relative effective Energy (%)***	
Relative weight strength RWS % ***	110
Relative bulk strength RBS % ***	150
Detonation velocity (m/s)* (without confinement)	5.000 ± 200

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg

\*\*\*\* All above values are theoretical, based on ideal detonation circumstances.

## USAGE

- Explogel 750S ignition requires the presence of a powerful Explogel 100 or Explogel 200 booster.
- The booster cartridge should be at least the same diameter as the Explogel 750S cartridge to provide optimal results.
- During the process of filling the holes with Explogel 750S, it is recommended to slightly cut the packaging film to achieve optimal filling.
- When there is suspension in the water (mud) inside the holes, care is required to ensure that the explosive column is continuous.
- Special caution is needed in order to assure that the explosive column is continuous (no space between cartridges). This can be achieved by using a tamping rod to push the last cartridges.
- If the water moves into the hole, the time the product stays inside the hole is significantly reduced.
- Minimum critical diameter is 60mm.
- Not suitable for mines with a risk of fire or explosion of coal dust and where flammable gases may be present.

## ADVANTAGES

- Highly water resistant.
- High energy allows an extended drilling pattern for more economical blasting costs.
- Excellent performance in every operation.
- Develops excellent gas volume for ignition displacement.
- Excellent safety against mechanical impacts and friction.

## SHELF LIFE

6 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in temperature range between -0 °C and 30 °C. Explogel 750S should be stored in explosives magazines class 1.1D, according to legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: Explogel 750S

Shipping name: Explosives, Blasting, Type E

UN No: 0241

Class of Danger: 1.1D

## PACKAGING

Cartridge (mm) Diameter x length	Cartridge weight (gr)	Pieces per carton box	Carton box weight NEQ (kg)
70x510	2500	10	25
80x490	3125	8	25
90x510	4166	6	25



# EXPLO gel 200 CONTOUR

**Explogel 200 Contour** is a specialized cap-sensitive emulsion explosive, packaged in hard antistatic PVC tubes, with 25 mm diameter.

In many blasting applications, the detonation must be split in such a way, to ensure that the remaining rock surface has suffered the least possible damage. The technique described is known as Smooth Blasting and is one of the controlled blasting techniques.

## USAGE

The **Explogel 200 Contour** is suitable for road tunnel constructions and more specifically in perimeter blastholes, and other underground applications. This product is usually used in blastholes of diameters 40-50 mm.

The diameter of the explosive in comparison to the diameter of the borehole should be:  **$\Phi_{\text{borehole}} \geq \Phi_{\text{explosive column}} \cdot 2$** .

In the instance of the distance between the perimeter boreholes being labeled as **Ec**, the distance between the productive and perimeter boreholes as **Vc** then we have a relationship between these two described as followed:  **$Ec = 0.8 \cdot Vc$** . These distances can vary depending on the rock type.

From the experience acquired by our presence at several road tunnel constructions as well as mining and quiring sites, empirical measures of the distances mentioned above can be providing by contacting ELTEK's team of experts.

Nevertheless, the ideal distance between the boreholes is depended on the hardness of the rock and may differ from site to site.

For the better application of the Smooth Blasting technique, the explosive column should have an equal distance to the side walls of the borehole. This is achieved by the addition of special parts, holding the tube that bears the emulsion explosive.

## ADVANTAGES

**Explogel 200 Contour** in this type of packaging is used to charge the perimeter blastholes. This technique serves a double cause.

To start with, free surfaces are created thus allowing the better evaluation of the performance of the productive blastholes.

Moreover, the free surfaces created are used in order to avoid over blasting and making sure the energy of the blast is restricted to the desired limits. If the blasting exceeds the desired limits the rocks on roof will be unstable. These events when occurred can lead to safety issues such as accidents due to rocks falling. Moreover, the costs of sufficiently supporting the roof of tunnels are huge making the total cost of a tunnel significantly higher.

The tubes bear caps and muffs (connectors) in order to assembly a higher length column, by connecting one tube to another, depending on the length of the borehole.

## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	1,15 ± 0,05
Oxygen Balance %	-0,30
Gas Volume (L/kg)	936
Heat of explosion (kJ/kg)	3.709
Relative effective Energy (%)***	
Relative weight strength RWS % ***	118
Relative bulk strength RBS % ***	141
Detonation velocity (m/s)* (without confinement)	4.800 ± 50

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg.

\*\*\*\* All above values are theoretical, based on ideal detonation circumstances.

## SHELF LIFE

12 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in temperature range between -0 °C and 30 °C. Explogel 200 Contour should be stored in explosives magazines class 1.1D, according to legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: Explogel 200 Contour  
Shipping name: Explosives, Blasting, Type E  
UN No: 0241  
Class of Danger: 1.1D

## PACKAGING

Cartridge (mm) Diameter x length	Cartridge weight (gr)	Pieces per carton box	Carton box weight NEQ (kg)
25x500	280	90	25,20



# EXPLOSplit

**ExploSplit** is a special custom-made cap-sensitive explosive product, combining Explogel emulsion explosive in a continuous string, with 6 gr/m detonating cord and it is one of the most advanced developments for the pre-splitting applications.

## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	1,17 ±0,05
Oxygen Balance %	+0,70
Gas Volume (L/kg)	944
Heat of explosion (kJ/kg)	
Relative effective Energy (%)***	
Relative weight strength RWS % ***	
Relative bulk strength RBS % ***	
Detonation velocity (m/s)*	7.000 ±300

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*\* All above values are theoretical, based on ideal detonation circumstances.



## SHELF LIFE

12 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in temperature range between -0 °C and 30 °C. ExploSplit should be stored in explosives magazines class 1.1D, according to legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: ExploSplit  
Shipping name: Explosives, Blasting, Type E  
UN No: 0241  
Class of Danger: 1.1D

## PACKAGING

Cartridge (mm) Diameter x length	Cartridge weight (gr)	Meters per carton box	Carton box weight NEQ (kg)
25x540	300	45	25

## USAGE

- Pre-splitting shots in open cast mining, road construction trenches, quarries and public works.
- Pre-splitting shots in tunnels and underground mining.
- It is initiated by detonator of min 0,7g PETN (or similar charge).
- Not suitable for mines with a risk of fire or explosion of coal dust and where flammable gases may be present.

## ADVANTAGES

- Reduced filling time per borehole.
- Easy handling.
- Extremely water resistant.
- Low content of produced toxic gases.



# DYNAMIS CAST BOOSTER

The **DYNAMIS cast boosters** are especially designed to provide high energy initiating power for tunneling and similar explosive applications underground. It ensures reliable initiation with all types of high strength detonator assemblies. **Cast Boosters DYNAMIS** consist of compact cylindrical charge with 1 blind hole for detonator. It is the most efficient initiator in the market and is recommended for a wide range of blasthole diameters.



## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	1,22 ±0,05
Oxygen Balance %	+1,90
Gas Volume (L/kg)	940
Heat of explosion (kJ/kg)	4.466
Relative effective Energy (%)***	
Relative weight strength RWS % ***	141
Relative bulk strength RBS % ***	170
Detonation velocity (m/s)*	6.200 ±200

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*\* All above values are theoretical, based on ideal detonation circumstances.

## USAGE

The **DYNAMIS Cast Boosters** are detonator sensitive, high energy emulsion based explosives available in various sizes designed to optimize initiation of all booster sensitive explosives. They are manufactured with an internal through-tunnel and detonator well for easy application with either electric, electronic or nonelectric detonators or similar strength detonating cord. The **DYNAMIS Cast Boosters** are formulated from the highest quality emulsion formulation and are enhanced with Sodium Perchlorate and other materials ensuring reliability, consistency and durability in all blasting environments.

## ADVANTAGES

- They are impervious to water and therefore ideal for the most severe field conditions.
- They do not contain nitroglycerine and hence cannot cause "dynamite headaches".
- They have been safety proven in the standard, friction, impact tests.
- They provide reliability, safety and durability for all underground mining, opencast mining and quarry applications.



## SHELF LIFE

12 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in the original packaging, in dry and ventilated warehouses and temperatures are not higher than 50° C, as well as in accordance with all the requirements of the local legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: DYNAMIS Cast Boosters  
Shipping name: Booster Without Detonator  
UN No: 0042  
Class of Danger: 1.1D

## PACKAGING

Cartridge (mm) Diameter x length	Cartridge weight (gr)	Pieces per carton box	Carton box weight NEQ (kg)
18x250	80	-	-
36x150	200	-	-
40x150	250	-	-
45x150	300	-	-
55x150	450	-	-

# EXPLO ANFO

**Explo Anfo** is a general-purpose explosive produced by mixing porous ammonium nitrate with diesel oil. The even distribution of the oil in the ammonium nitrate is achieved with the help of spray nozzles (injectors).

It is not water resistant and its use is recommended only in dry holes. The product is used at temperatures from -20 oC to 40oC.

## TECHNICAL SPECIFICATIONS

Density (g/cm <sup>3</sup> )	0,80
Oxygen Balance %	+0,94
Gas Volume (L/kg)	981
Heat of explosion (kJ/kg)	3.649
Relative effective Energy (%)**	
Relative weight strength RWS % **	100
Relative bulk strength RBS % **	109
Detonation velocity (m/s)*	2.500 - 3.800

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg

\*\*\* All above values are theoretical, based on ideal detonation circumstances.



## SHELF LIFE

6 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Must be stored in temperature range between -0 °C and 30 °C. Explo Anfo should be stored in explosives magazines class 1.1D, according to legislation. It should be handled and transported according to its Safety Data Sheet (MSDS).

## CLASSIFICATION

Authorised name: Explo ANFO  
Shipping name: Explosives, Blasting, Type B  
UN No: 0082  
Class of Danger: 1.1D

## PACKAGING

Polyethylene bags of 25kgs weight.

## USAGE

- In surface applications (quarries, mining, road construction trenches, public works, etc.) in holes with a diameter greater than 65mm with the help of booster (Explogel 100).
- In horizontal underground blast holes larger than 40mm, with compressed air supply (recommended pressure is 3.5 – 4.0 bar) and with the help of a strong booster (booster) Explogel 200. In this case measures should be taken to avoid static electricity.
- It is activated with the help of a booster placed at the base of the hole, using a detonator (non-electric, electric) and detonating cord.

## ADVANTAGES

It provides optimal charging in vertical boreholes due to its free flow, achieving a very good charge density ( $\Phi$  of hole =  $\Phi$  of explosive column), resulting in the production of a large volume of aggregates with very good crushing.

It is a low-cost, simple-to-apply explosive.



# UG BULK EMULSION 100

**UG BULK EMULSION 100** is a booster sensitive emulsion explosive. This product combines both high detonation velocity and high energy during its explosion, thus covering every need during blasting processes.

**UG BULK EMULSION 100** is produced on site by the modern technology of ELTEK's mixing-charging systems. This innovative system ensures maximum risk reduction through the delayed activation of the emulsion explosive after usually 30 minutes.

**Benefits when used in underground mining include: drill hole savings, good water insensitivity, and customizable explosive properties. Moreover, by using UG BULK EMULSION 100, maximum borehole charging is obtained.**



## TECHNICAL SPECIFICATIONS

Density of non-sensitized matrix (g/cm <sup>3</sup> )	1,37 ±0,10
Gassed product density (g/cm <sup>3</sup> )	1,10 ±0,10
Oxygen Balance %	0
Gas Volume (L/kg)	920
Heat of explosion (kJ/kg)	2.725
Relative effective Energy (%)***	
Relative weight strength RWS % ***	115
Relative bulk strength RBS % ***	135
Detonation velocity (m/s)*	>5.500

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg

\*\*\*\* All above values are theoretical, based on ideal detonation circumstances.

## USAGE

Suitable for blasting in road tunnels and underground mining operations.

The bulk charging systems fit into every tunnel profile and is available in different sizes and on different carrier vehicles. As an independent unit, it can be used with great flexibility.

## ADVANTAGES

- UG BULK EMULSION 100 can be pumped with a pump capacity of 30 to 50 kg/min. The loading time of a working face is 40% reduced compared to conventional loading work with cartridged explosives.
- Extremely resistant to water
- Very low amount of toxic fumes
- Develops high gas volume
- Excellent safety against mechanical impact and friction
- The three components Matrix, R1 and R2, which are used to produce UG BULK EMULSION 100, are not explosives. This facilitates the safety of transportation and storage on the construction site. Deliveries to the construction site are made by truck in certified tanks of maximum weight of 1400 kg each.

## SHELF LIFE

6 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Storage can take place on the construction site in a warehouse or underground at a temperature of at least 15 °C. The three components Matrix, R1 and R2, which are used to produce UG BULK EMULSION 100, are not explosives. This facilitates the safety of transportation and storage on the construction site. It should be handled and transported according to its Safety Data Sheet (MSDS).

## PACKAGING

Certified inox tanks of 1.300kgs or 1.400kgs weight.

# UG BULK EMULSION **HYDRA 6000**

**UG BULK EMULSION HYDRA 6000** is a booster sensitive emulsion explosive. This product combines both high detonation velocity and high energy during its explosion, thus covering every need during mining processes.

**UG BULK EMULSION HYDRA 6000** is a complementary product to UG BULK EMULSION 100 and is used when higher performance needs to be met.

**UG BULK EMULSION HYDRA 6000** is produced on site by modern technology of ELTEK's mixing-charging systems. This innovative system ensures maximum risk reduction through the delayed activation of the emulsion explosive after usually 30 minutes.

**Benefits when used in underground mining include: drill hole savings, good water insensitivity, and customizable explosive properties. Moreover, by using UG BULK EMULSION HYDRA 6000, maximum borehole charging is obtained.**

**This product contains SODIUM PERCHLORATE in order to achieve great power and is a unique bulk emulsion product.**

## TECHNICAL SPECIFICATIONS

Density of non-sensitized matrix (g/cm <sup>3</sup> )	1,40 ±0,10
Gassed product density (g/cm <sup>3</sup> )	1,10 ±0,10
Oxygen Balance %	-0,90
Gas Volume (L/kg)	930
Heat of explosion (kJ/kg)	3.227
Relative effective Energy (%)***	
Relative weight strength RWS % ***	136
Relative bulk strength RBS % ***	155
Detonation velocity (m/s)*	>6.500

\* The velocity of detonation will depend on application, rock type, blasthole diameter and confinement.

\*\*\* The 100% of relative effective energy refers to ANFO: Density 0,80 g/cm<sup>3</sup>, Effective energy 2,50 MJ/Kg

\*\*\*\* All above values are theoretical, based on ideal detonation circumstances.

## USAGE

Suitable for blasting in road tunnels and underground mining operations. **It can be used successfully on all types of rocks and mining operations of very high needs.**

The bulk charging systems fit into every tunnel profile and is available in different sizes and on different carrier vehicles. As an independent unit, it can be used with great flexibility. By choosing UG BULK EMULSION HYDRA 6000, the highest performance of bulk emulsion is achieved.

## ADVANTAGES

- UG BULK EMULSION HYDRA 6000 can be pumped with a pump capacity of 30 to 50 kg/min. The loading time of a working face is 40% reduced compared to conventional loading work with cartridge explosives.
- Suitable for use in boreholes that are dropping after the loading.
- Extremely resistant to water.
- Very low volume of toxic fumes.
- Reduces post-blast fumes and improves turnaround time.
- Excellent performance in operation with high performance needs.
- Develops excellent gas volume.
- Excellent safety against mechanical impact and friction.
- The three components Matrix, R1 and R2, which are used to produce UG BULK EMULSION HYDRA 6000, are not explosives. This facilitates the safety of transportation and storage on the construction site. Deliveries to the construction site are made by truck in standard containers with a maximum weight of 1400 kg.

## SHELF LIFE

6 months from the date of manufacture, if stored under the designated conditions.

## STORAGE - HANDLING

Storage can take place on the construction site in a warehouse or underground at a temperature of at least 15 °C. The three components Matrix, R1 and R2, which are used to produce UG BULK EMULSION HYDRA 6000, are not explosives. This facilitates the safety of transportation and storage on the construction site. It should be handled and transported according to its Safety Data Sheet (MSDS).

## PACKAGING

Certified inox tanks of 1.300kgs or 1.400kgs weight.



**ELTEK**

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“**The Power of  
your Safety**”

