

TECHNICAL DATA SHEET

PYROSANG - G

Generic Name by SUCAMEC: NON-SENSITIZED BULK EMULSION OR HYDROGEL

DESCRIPTION AND COMPOSITION:

PYROSAN-G is a bulk emulsion of the water-in-oil type, with ammonium nitrate reaction inhibitor components and minerals that contain pyrite in their composition, being possible to apply it in hot soils with temperatures up to 100°C.

PYROSAN-G is characterized by high detonation velocity, high detonation pressure, good water resistance and resistant to mechanical stimuli (shock and friction) providing a good quality of blasting gases.

USES:

PYROSAN-G is used in open pit mining and is mixed in situ with a gasifying solution that sensitizes it prior to loading into the drills with the help of a factory truck that has been specially designed with a PLC system, which allows adequate sensitization of the matrix.

PYROSAN-G is designed to work in soils with temperatures ranging from -5°C to 100°C. For different temperatures it is recommended to contact Technical Assistance.

The sensitized PYROSAN-G must be initiated by a primer consisting of a HDP Booster, of a weight in accordance with the weight of the explosive columns used and with a Fanel detonator up to a temperature of 65°C. For temperatures higher than 65°C it is recommended to contact Famesa Explosives Technical Assistance.

The maximum waiting time for detonating drill holes loaded with PYROSAN-G in hot ground up to 100°C with pyrite ore present is 12 hours, although this time depends on aspects such as hole diameter, rock density, presence of water in the ground and the initiation system used.

At least 20 minutes should elapse between loading the PYROSAN-G and placing the "block" in the drill hole.

Among the advantages of using PYROSAN-G are the following:

- It can be used in rocks of any hardness and in dry, wet and flooded soils.
- When loading the drills, the explosive columns are completely coupled, developing with this condition all the energy deposited in them.
- Its use represents a safe work, in reactive soils and drill hole temperatures up to 100°C.
- Due to its high breaking power, it is possible to extend the drilling templates and reduce the costs involved.
- Due to the practicality of its handling, it allows to reduce loading times.


TECHNICAL CHARACTERISTICS:

	UNIT	PYROSAN-G
Matrix relative density	g/cm ³	1.35 ± 3%
Relative density of sensitized matrix (*)	g/cm ³	1.01 to 1.20
Viscosity of the matrix under normal conditions (**)	cP	Min. 14 000
Sensitized matrix detonation velocity (***)	m/s	4 400 to 5 500
Detonation pressure	kbar	49 to 91
Energy	kcal/kg	1 050
Normal volume of gases	l/kg	1 196

Relative power by weight (****)	(%)	72
Relative power by volume (****)	(%)	119
Water resistance	---	Excellent
Fume category	---	Class 1
Critical diameter	mm	102 (4 inches)
Time of permanence in the drill hole	hours	12

(*) Density depends on temperature and gasifier concentration.

(**) Measured with BROOKFIELD HA DVII at 50 RPM.

(***) Confined in 4" diameter PVC pipe.

(****) Relative powers referred to ANFO, with conventional power of 100.

The values expressed are results at normal conditions (20°C and 1 atm.)

PACKAGING:

PYROSAN-G is presented in bulk and transported safely in tank trucks.

TRANSPORT:

Class : 5
Division : 1.5
UN No. : 3375



STORAGE AND WARRANTY:

PYROSAN-G should be stored in magazines at **temperatures between 5°C and 30°C**, located in safe, well ventilated, dry areas, protected from rain and heat. Also, the explosive inventory should be rotated, avoiding the use of new materials before using old ones. And it must be stored according to the current compatibility table of the relevant authority.

PYROSAN-G kept in its original packaging and stored in the above mentioned temperature conditions has a **warranty period of 3 months** after its production date.

WARNING:

FAMESA EXPLOSIVOS S.A.C. has safe products, but they may become dangerous elements in inexperienced hands.

The purchaser or user must comply with the applicable regulations during transport, storage and use, as well as train duly all its personnel involved in its loading and handling, providing mechanical aids for loads over 25 kg per person.

FAMESA EXPLOSIVOS S.A.C. assumes no liability for transport, storage and/or improper use their products may experience.

The information and recommendation described in this document do not necessarily cover all product applications nor the different conditions under which it is being used. These are based on the experience, research and tests done by Famesa Explosivos S.A.C., who does not guarantee favorable results nor assume any responsibility, expressed or implied, in relation to the use of these suggestions. This product may be changed without prior notice.