

TECHNICAL DATA SHEET

EMULGRAN

Generic Name by SUCAMEC: CARTRIDGED EMULSION OR HYDROGEL

DESCRIPTION AND COMPOSITION:

EMULGRAN is an explosive agent based on explosive emulsion contained within a plastic casing containing sensitizing and energizing substances.

In order to satisfy the market requirements, FAMESA EXPLOSIVOS S.A.C. offers the following types:

- EMULGRAN 300.
- EMULGRAN 600.

EMULGRAN has been designed to work in drills with diameters greater than 3 inches as a column load flooded or with plenty of water that cannot be evacuated or where mechanized loading is not possible.


USES:

EMULGRAN has the following advantages during its usage:

- It has a high density.
- It generates substantial volumes and gas pressures.
- It develops a high level of energy per unit of volume.
- It is 100% water resistant and withstands high hydrostatic pressures and unusual working temperatures, both high and low.
- It provides significantly superior performance to ANFO.
- It is safe against stimuli such as impact, fire, and falls.

The handling temperature range of the EMULGRAN is from -8°C up to 50°C. For different temperatures it is recommended to contact the Technical Assistance area.

TECHNICAL CHARACTERISTICS:

	UNIT	EMULGRAN 300	EMULGRAN 600
Relative density	g/cm ³	1.25 ± 0.1	1.28 ± 0.1
Velocity of Detonation (*)	m/s	5 500 ± 300	4 900 ± 300
Detonation pressure	kbar	95	77
Energy	kcal/kg	790	980
Volume of gases	l/kg	965	920
Relative power by weight (**)	(%)	88	109
Relative power by volume (**)	(%)	134	170
Sensitivity to HDP Booster	---	150 g (1/3 pound)	150 g (1/3 pound)
Water resistance	---	Excellent	Excellent

(*) Velocity of Detonation confined in a 6-inch diameter iron tube.

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

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

PACKAGING:
Packing 1.1D

	BOX MATERIAL	BOX CAPACITY (Pcs.)	NET WEIGHT (Kg)	GROSS WEIGHT (Kg)	OUTER DIMENSIONS (cm)
EMULGRAN 300 3 ½" x 16"	Cardboard	8	25.0	26.9	46.0 x 39.7 x 26.8
EMULGRAN 300 4 ½" x 16"	Cardboard	4	20.0	21.9	46.0 x 39.7 x 26.8
EMULGRAN 300 5" x 16"	Cardboard	4	28.0	29.9	46.0 x 39.7 x 26.8
EMULGRAN 300 5" x 12"	Cardboard	5	25.0	26.9	66.8 x 29.6 x 25.8
EMULGRAN 300 3 ¾" x 24"	Cardboard	4	21.0	22.9	66.8 x 29.6 x 25.8
EMULGRAN 600 3 ½" x 24"	Cardboard	5	25.0	26.9	66.8 x 29.6 x 25.8

TRANSPORT:

Class : 1
Division : 1.1D
UN No. : 0241


STORAGE AND WARRANTY:

EMULGRAN 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.

EMULGRAN, when kept in its original packaging and stored under the previously mentioned temperature conditions, is covered by a **12-month warranty** from 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.