

TECHNICAL DATA SHEET

SAN-G ENERGY

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

DESCRIPTION AND COMPOSITION:

SAN-G ENERGY is part of FAMESA EXPLOSIVOS S.A.C.'s family of high energy bulk explosives, which comprises products designed for dry, water and dewatered blasting applications, in addition to providing the widest range of densities of bulk explosives.

SAN-G ENERGY is a blasting agent that can be sensitized in mining operations prior to loading into drill holes with N-30 Solution, producing an explosive mixture of variable density, water resistant and higher detonation velocity than ANFO in different proportions and being gasified.

SAN-G ENERGY is a gassing emulsion consisting of a microscopic oxidizing solution dispersed in a continuous combustible phase and stabilized by an emulsifier. Due to its chemical composition, it offers high energy and detonation velocity that allows us to obtain a high breaking power (brisance), its oxygen balance reduces the emission of nitrous gases after detonation.


USES:

SAN-G ENERGY is a versatile alternative blasting agent for hard rock applications in surface mining.

SAN-G ENERGY is designed to be handled and worked in ground temperatures ranging from 0°C to 40°C.

SAN-G ENERGY can be pumped or gravity loaded directly from the factory trucks into the drill holes. Once the drills are loaded, about 20 minutes are allowed to elapse before the stemming is placed in the drill hole.

It is not recommended for use in soils with high pyrite content.

TECHNICAL CHARACTERISTICS:

	UNIT	SAN-G ENERGY
Matrix emulsion density	g/cm ³	1.35 ± 3%
Density of sensitized matrix emulsion (*)	g/cm ³	1.00 to 1.20
Viscosity of the matrix under normal conditions (**)	cP	Min. 14 000
Velocity of detonation (***)	m/s	5 000 to 6 000
Detonation pressure	kbar	63 to 104
Energy	kcal/kg	915
Normal volume of gases	l/kg	1 086
Relative power by weight (****)	%	98
Relative power by volume (****)	%	166
Water resistance	---	Excellent

Fume category	---	Class 1
Critical diameter	mm	76 (3 inches)
Time of permanence in the drill hole	days	7

(*) Density depends on temperature and gasifier concentration.

(**) Measured on BROOKFIELD HA DVII viscometer at 50 RPM.

(***) Confined in a 6-inch diameter tube.

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

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

PACKAGING:

SAN-G ENERGY is delivered in bulk and transported safely in tank trucks.

TRANSPORT:

Class : 5

Division : 5.1

UN No. : 3375



STORAGE AND WARRANTY:

SAN-G ENERGY should be stored in powder magazines at **temperatures between 0°C and 40°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.

SAN-G ENERGY 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.