



SAFETY DATA SHEET
KEMIITTI 510

Päiväys: 13.2.2007
Edellinen päiväs: 13.2.2007

1. Identification of the substance/ preparation and of the company / undertaking

Trade name: KEMIITTI 510

Use of the preparation: Explosive for civil use

Manufacturer: OY FORCIT AB
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2. Hazards identification

Classification of mixture: E; R2

Hazards: Risk of explosion by shock, friction, fire or other sources of ignition

3. Composition and information on ingredients

Definition: Water-in-oil emulsion, mixed on site, pumped immediately to blasthole

Hazardous ingredients: Ammonium nitrate, Calcium nitrate

Name of ingredient:	Content :	CAS-#:	Code letters; R-phrases:
Ammonium nitrate	70-85 %	6484-52-2	O; R5-9
Calcium nitrate	~30 %	7631-99-4	O; R8
Natriumtiosyanate	0,05%	540-72-7	X _n ; R20/21/22-32

4. First aid measures

Inhalation:	Medical help necessary in case of combustion gases or thermal decomposition products have reached the respiratory passages. Bring victim to fresh air as quickly as possible, and contact a doctor. If the person is unconscious hold and transport in side position. If breathing stops apply artificial respiration. Symptoms do not necessarily appear immediately in persons who have inhaled combustion gases. Patients should be kept under medical observation for at least 48h.
Skin:	Wash off with water and soap.
Eyes:	Rinse with plenty of water, and consult a doctor.
Ingestion:	Drink immediately plenty of water, and consult a doctor.

5. Fire fighting measures

General:	Fight adjacent fire with all available means to prevent fire from reaching the product. If fire is about to reach the product or the product is burning: Do not try to extinguish, risk of explosion. Immediately evacuate danger zone and warn neighborhood announcing risk of explosion.
Special exposure hazards in a fire:	In case of fire or heat toxic/harmful gases, vapours and pyrolysis products may be formed of the substance, e.g. nitrogen oxides (nitrous gases), Carbon monoxide and Ammonia. Explosion hazard. Danger of toxic lung oedema formation.

6. Accidental release measures

Personal precautions:	Avoid skin contact with the product.
Environmental precautions:	Prevent substance from soaking into soil, waters and drains.
Methods for cleaning up:	Collect scattered product by tool which is made of non-sparking material, plastic or aluminium, for example. Fill into marked sealable containers; dispose of as required by the authorities.

7. Handling and storage

Handling:	Keep away from heat and ignition sources. Do not smoke. Avoid mechanical stress and use non-sparking tools.
Storage:	Keep articles dry, cool and locked up.
Special measures:	National regulations must be followed with handling and storage.

8. Exposure controls / personal protection

Limit values for occupational safety:	None
Protection from exposure:	Use gloves and protective goggles. Always wash hands before breaks and at the end of work.

9. Physical and chemical properties

Physical state:	Water-in-oil emulsion, vaselin-like mass in container
Colour:	Yellowish
Odor:	Odorless
Melting point:	-
Thermal decomposition:	> 100 °C (water contained in the nitrate solution vaporizes)
Flash point:	> 200 °C (flash point of the oil contained in the product)
Risk of explosion:	Strong shock, friction or heating, especially >200 °C, in confined space.
Relative density:	1,4 g/cm ³
Solubility:	Water-solubility: almost insoluble; Fat-solubility: Oil-phase is soluble

10. Stability and reactivity

Conditions to avoid:	Risk of explosion by shock, friction, fire or other sources of ignition.
Materials to avoid:	Strong bases (formation of ammonia), do not let foreign materials get mixed in the product.
Hazardous decomposition products:	In a fire or if heated above 200 °C, carbon monoxide, nitrogen oxides (nitrous gases), ammonia.

11. Toxicological information

Empirical data on effects on humans: Ammonium nitrate can cause skin irritation in repeated contact.

12. Ecological information

Ecotoxicity: According to present knowledge non-toxic.

Mobility: Water-soluble nitrates may drift to groundwater and reduce their quality.

Degradability: Ammonium nitrate decomposes completely in nature.

Bioaccumulation: Does not accumulate.

13. Disposal considerations

Disposal: Waste containers must be disposed only in accordance with national regulations. Uncleaned empty containers are to be handled in the same way as the ones containing the product.

14. Transport information

UN - number: Do not apply

Packaging group: Do not apply

Packaging code: Do not apply

ADR/RID - class: Do not apply

Classification code: Do not apply

Proper shipping name: Do not apply

IMDG - class: Do not apply

EMS - number: Do not apply

ICAO/IATA - class: Do not apply

15. Regulatory information

Labeling:	The container is labeled as required by the Finnish Ministry of Communications.
Other regulations:	Product should be handled only by authorized persons. Use according to the specific national regulations for producing and handling explosives.

16. Other information

R-phrases:	R2: Risk of explosion by shock, friction, fire or other sources of ignition. R5: Heating may cause an explosion R8: Contact with combustible material may cause fire R9: Explosive when mixed with combustible material. R32: Generates very toxic fumes when mixed with acid R20/21/22 Harmful when inhaled, in contact with skin or swallowed
Information on usage:	Product is always delivered to blast holes by OY Forcit AB.
Further information:	Technical product information sheet is available from OY Forcit AB. (other additional information www.forcit.fi) The information contained is based on the present state of our knowledge. It does not represent any guarantee with regard to product properties or their suitability for particular uses. Because the use of this information and instructions or the conditions of use of the product are not at our control, it is the users duty to specify the circumstances for the safe use of the product.