

**SAFETY DATA SHEET****Kemiitti 510**

The safety data sheet is in accordance with Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

**SECTION 1: Identification of the substance / mixture and of the company / undertaking**

Date issued 25.05.2015

Revision date 04.09.2018

**1.1. Product identifier**

Product name Kemiitti 510

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use of the substance / preparation Explosive for civil use

The chemical can be used by the general public No

**1.3. Details of the supplier of the safety data sheet****Manufacturer**

Company name OY FORCIT AB

Postal address P.O.Box 19

Postcode 10901

City Hanko

Country Finland

Telephone number +358 (0)207 440 400

Email [forcit@forcit.fi](mailto:forcit@forcit.fi)

**1.4. Emergency telephone number**

Emergency telephone Telephone number: countrywise telephone number  
Description: National poison information center / National helpdesk

**SECTION 2: Hazards identification****2.1. Classification of substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP / GHS] Expl. 1.1; H201  
Eye Irrit. 2; H319

## 2.2. Label elements

### Hazard pictograms (CLP)



Signal word	Danger
Hazard statements	H201 Explosive; mass explosion hazard. H319 Causes serious eye irritation.
Precautionary statements	P210 Keep away from heat / sparks / open flames / hot surfaces. – No smoking. P250 Do not subject to grinding/shock/friction. P281 Use personal protective equipment as required. P370+P380 In case of fire: Evacuate area. P372 Explosion risk in case of fire. P373 DO NOT fight fire when fire reaches explosives.
Other label information (CLP)	Explosives are labeled and packaged in accordance with the requirements for explosives only.

## 2.3. Other hazards

Other hazards No data recorded.

## SECTION 3: Composition / information on ingredients

### 3.2. Mixtures

Substance	Identification	Classification	Contents
Ammonium Nitrate	CAS No.: 6484-52-2 EC No.: 229-347-8 REACH Reg. No.: 01-2119490981-27-0004	Ox. Sol. 3; H272 Eye Irrit. 2; H319	85 - 95 %
Distillates (petroleum) , hydrotreated heavy naphthenic	CAS No.: 64742-52-5 EC No.: 265-155-0 REACH Reg. No.: 01-2119467170-45-0002		1 - 6 %
Monoethylene glycol (MEG)	CAS No.: 107-21-1 EC No.: 203-473-3 Index No.: 603-027-00-1	Acute tox. 4; H302 STOT RE 2; H373	0 - 1,5 %
Substance comments	The full text for all hazard statements is displayed in section 16.		

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.

Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. If skin irritation occurs: Get medical advice/attention.
Eye contact	Promptly wash eyes with plenty of water while lifting the eye lids. Get medical advice/attention.
Ingestion	Immediately rinse mouth and drink plenty of water (200-300 ml). Get medical attention.

## 4.2. Most important symptoms and effects, both acute and delayed

Information for health personnel	Symptoms do not necessarily appear immediately. Patients should therefore be kept under medical observation for at least 48 hours.
General symptoms and effects	Not determined.
Acute symptoms and effects	Not determined.

## 4.3. Indication of any immediate medical attention and special treatment needed

Medical treatment	Not determined.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	DO NOT fight fire when fire reaches explosives. Explosion risk in case of fire.
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### 5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	Explosion risk in case of fire. Heating may cause an explosion. Fire or high temperatures create: NOx, CO, NH3
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### 5.3. Advice for firefighters

Fire fighting procedures	Fight adjacent fire with all available means to prevent fire from reaching the product. DO NOT fight fire when fire reaches explosives. Leave danger zone immediately.
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## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Personal protection measures	Avoid contact with eyes and prolonged skin contact. For personal protection, see section 8.
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### 6.2. Environmental precautions

Environmental precautionary measures	Do not discharge into drains, water courses or onto the ground.
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### 6.3. Methods and material for containment and cleaning up

Cleaning method	Collect spilled product mass with suitable non-sparking tools (made of wood, plastic or aluminum). Place into marked, sealable containers and dispose of as required by the authorities.
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## 6.4. Reference to other sections

Other instructions

Firefighting, see Section 5.  
 Personal protective equipment, see Section 8.2.  
 Disposal of waste containing product residues, see Section 13.1.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Handling

Risk of explosion by shock, friction or other sources of ignition. Isolate from hot surfaces. Use non sparking handtools and explosion-proof electric equipment. Do not smoke or use open fire, or other sources of ignition.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage

Do not apply, the product is not stored.

### 7.3. Specific end use(s)

Specific use(s)

See Section 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

Substance	Identification	Value	TWA Year
Ammonium Nitrate	CAS No.: 6484-52-2		

### DNEL / PNEC

Substance

Ammonium Nitrate

DNEL

**Group:** Professional  
**Route of exposure:** Long term (repeated) - Inhalation - Systemic effect  
**Value:** 37,6 mg/m<sup>3</sup>

**Group:** Professional  
**Route of exposure:** Long term (repeated) - Dermal - Systemic effect  
**Value:** 21,3 mg/kg

PNEC

**Route of exposure:** Sewage treatment plant STP  
**Value:** 18 mg/l

**Route of exposure:** Saltwater  
**Value:** 0,045 mg/l

**Route of exposure:** Freshwater  
**Value:** 0,45 mg/l

**Value:** 4,5 mg/l

**Comments:** Periodic discharge

### 8.2. Exposure controls

## Safety signs



### Eye / face protection

Eye protection Use eye protection.

### Hand protection

Hand protection Protective gloves are recommended.

Suitable materials Gloves of nitrile rubber, PVA or Viton are recommended.

### Skin protection

Skin protection (except hands) Wear appropriate clothing to prevent any possibility of skin contact.

### Respiratory protection

Respiratory protection Respiratory protection not required.

### Hygiene / environmental

Specific hygiene measures Wash hands always after work, before eating, drinking, smoking or going to the bathroom.

### Appropriate environmental exposure control

Environmental exposure controls Avoid the product from entering drains, sewers, waterways and soil.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state Water-in-oil emulsion. Vaseline-like mass.

Colour Yellowish.

Odour Odourless.

Odour limit Comments: Not relevant.

pH Status: In delivery state  
Comments: Not relevant.

Melting point / melting range Comments: Not relevant.

Boiling point / boiling range Comments: Not relevant.

Flash point Value: > 200 °C

Evaporation rate Comments: Not relevant.

Flammability (solid, gas) Not determined.

Vapour pressure	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Specific gravity	Value: 0,95 - 1,15 kg/dm <sup>3</sup>
Solubility description	The mixture is almost insoluble. Ammonium nitrate as such is very soluble in water.
Partition coefficient: n-octanol/water	Comments: Ammonium nitrate: <1
Spontaneous combustability	Comments: Not determined.
Decomposition temperature	Value: > 100 °C
Viscosity	Comments: Not determined.
Explosive properties	Explosive
Oxidising properties	Ammonium nitrate: oxidizing

## 9.2. Other information

### Other physical and chemical properties

Comments	Not determined.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reactivity	No dangerous reactions known under conditions of normal use.
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### 10.2. Chemical stability

Stability	Stable under normal temperature conditions and recommended use.
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### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	None known under normal handling conditions.
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### 10.4. Conditions to avoid

Conditions to avoid	Risk of explosion by shock, friction, fire or other sources of ignition.
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### 10.5. Incompatible materials

Materials to avoid	Strong alkalis. Do not let foreign materials get mixed in the product.
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### 10.6. Hazardous decomposition products

Hazardous decomposition products	During fire, toxic gases (CO, CO <sub>2</sub> , NO <sub>x</sub> , NH <sub>3</sub> ) are formed.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Substance	Ammonium Nitrate
Acute toxicity	<p><b>Type of toxicity:</b> Acute  <b>Effect tested:</b> LD50  <b>Route of exposure:</b> Oral  <b>Value:</b> 2950 mg/kg  <b>Animal test species:</b> Rat  <b>Test reference:</b> IUCLID 5</p> <p><b>Type of toxicity:</b> Acute  <b>Effect tested:</b> LD50  <b>Route of exposure:</b> Dermal  <b>Value:</b> &gt; 5000 mg/kg  <b>Animal test species:</b> Rat  <b>Test reference:</b> IUCLID 5</p>

### Other information regarding health hazards

Irritation	Irritating to the eyes. May cause skin irritation.
Corrosivity	Not known.
Sensitisation	Not known.
Repeated dose toxicity	Not known.
Mutagenicity	No data recorded.
Carcinogenicity, other information	Not known.
Reproductive toxicity	No data recorded.
Other adverse toxicological effects	Not determined.

## SECTION 12: Ecological information

### 12.1. Toxicity

Substance	Ammonium Nitrate
Acute aquatic, fish	<p><b>Value:</b> 447 mg/l  <b>Test duration:</b> 48 h  <b>Method:</b> LC50  <b>Test reference:</b> IUCLID 5</p>
Substance	Ammonium Nitrate
Acute aquatic, algae	<p><b>Value:</b> &gt; 1700 mg/l  <b>Test duration:</b> 10 d  <b>Method:</b> EC50  <b>Test reference:</b> IUCLID 5</p>
Substance	Ammonium Nitrate
Acute aquatic, Daphnia	<p><b>Value:</b> 490 mg/l  <b>Test duration:</b> 48 h  <b>Method:</b> EC50  <b>Test reference:</b> IUCLID 5</p>

Ecotoxicity

Not classified as dangerous to the environment. However, the product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters.

## 12.2. Persistence and degradability

Persistence and degradability, comments

Ammonium nitrate: biodegradable

## 12.3. Bioaccumulative potential

Bioaccumulation, evaluation

Ammonium nitrate: not bioaccumulative (LogPow <1)  
Base oil hydrocarbons: possibly accumulative (logPow >6).

## 12.4. Mobility in soil

Mobility

The product contains substances, which are water soluble and may spread in water systems.

## 12.5. Results of PBT and vPvB assessment

PBT assessment results

Not determined.

vPvB evaluation results

Not determined.

## 12.6. Other adverse effects

Other adverse effects, comments

No data recorded.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Specify the appropriate methods of disposal

Do not allow runoff to sewer, waterway or ground. Do not mix with normal waste. Explosives waste and explosives-tainted containers must be collected immediately and disposed only under the supervision of experts and in accordance with given regulations. Uncleaned empty containers are to be handled in the same way as the ones containing products.

Product classified as hazardous waste

Yes

## SECTION 14: Transport information

### 14.1. UN number

ADR / RID / ADN

0241

IMDG

0241

ICAO / IATA

0241

### 14.2. UN proper shipping name

ADR / RID / ADN

EXPLOSIVE, BLASTING, TYPE E



IMDG	EXPLOSIVE, BLASTING, TYPE E
ICAO / IATA	EXPLOSIVE, BLASTING, TYPE E

### 14.3. Transport hazard class(es)

ADR / RID / ADN	1.1D
IMDG	1.1D
ICAO / IATA	1.1D
Comments	Prohibited from air transport.

### 14.4. Packing group

### 14.5. Environmental hazards

Comments	Not determined.
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### 14.6. Special precautions for user

Special safety precautions for user	Not determined.
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### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

### Additional information

Additional information	Not determined.
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### IMDG / ICAO / IATA Other information

EmS	F-B, S-X
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## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

Comments	For professional users only.
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### 15.2. Chemical safety assessment

CSR required	No
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## SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3)	H201 Explosive; mass explosion hazard. H272 May intensify fire; oxidiser. H302 Harmful if swallowed. H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure
Classification according to Regulation (EC) No 1272/2008 [CLP / GHS]	Expl. 1.1; H201 Eye Irrit. 2; H319

Key literature references  
and sources for data

REACH Directive (EC) 1907/2006  
CLP Regulation (EC) 1272/2008  
Material Safety Data Sheets on raw materials

Version

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Comments

The information in this MSDS 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 is not at our control, it is the user's duty to specify the circumstances for the safe use of the product.