



SAFETY DATA SHEET

Offshore Kemiitti

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 28.04.2015

Revision date 09.04.2018

1.1. Product identifier

Product name Offshore Kemiitti

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

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
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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	Not known.
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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	60 – 75 %
Aluminium powder (stabilised)	CAS No.: 7429-90-5 EC No.: 231-072-3 REACH Reg. No.: 01-2119529243-45-0044		4 – 14 %
Lubricating oils (petroleum) , C20-C50, hydrotreated neutral oilbased	CAS No.: 72623-87-1 EC No.: 276-738-4 REACH Reg. No.: 01-2119474889-13-0000	Asp. tox 1; H304 CLP classification, notes: Contains DMSO extract less than 3 %	1 – 6 %
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.
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Skin contact	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.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards	May explode when heated or when exposed to flames or sparks.
Hazardous combustion products	May develop toxic or corrosive fumes if heated. (NO _x , CO, NH ₃)

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 explosive mass with suitable non-sparking tools (made of wood 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: Worker
Route of exposure: Long term (repeated) – Inhalation – Systemic effect
Value: 37,6 mg/m³

Group: Worker
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 Chemical resistant gloves required for prolonged or repeated contact.

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.

Colour Grey.

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: 1,27 – 1,33 g/cm3
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 Lubricating oil: log Kow for base oil hydrocarbons: > 6
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. Strong acids. 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 ₂ , NO _x , NH ₃) are formed.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Substance	Ammonium Nitrate
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: 2950 mg/kg Animal test species: Rat Test reference: IUCLID 5</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: > 5000 mg/kg Animal test species: Rat Test reference: 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 determined.
Carcinogenicity, other information	Not known.
Teratogenic properties	No data recorded.
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>Value: 447 mg/l Test duration: 48 h Method: LC50 Test reference: IUCLID 5</p>
Substance	Ammonium Nitrate
Acute aquatic, algae	<p>Value: 1700 mg/l Test duration: 10 d Method: EC50 Test reference: IUCLID 5</p>
Substance	Ammonium Nitrate
Acute aquatic, Daphnia	<p>Value: 490 mg/l Test duration: 48 h Method: EC50 Test reference: 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.
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12.2. Persistence and degradability

Persistence and degradability, comments	Ammonium nitrate: biodegradable Lubricating oil: not readily degradable (OECD 301B).
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12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Ammonium nitrate: not bioaccumulative (LogPow <1) Lubricating oil: possibly accumulative (log Kow >6).
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12.4. Mobility in soil

Mobility	The product contains substances, which are water soluble and may spread in water systems.
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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.
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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.
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Product classified as hazardous waste	Yes
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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
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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

Comments	Not determined.
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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

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. H304 May be fatal if swallowed and enters airways. H319 Causes serious eye irritation.
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	2
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.