

SAFETY DATA SHEET

**Kemix-pipecharge, Kemix A
-pipecharge**

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	27.05.2015
Revision date	23.08.2018

1.1. Product identifier

Product name	Kemix-pipecharge, Kemix A -pipecharge
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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
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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. P280 Wear protective gloves / protective clothing / eye protection / face protection. 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	70 - 85 %
Aluminium powder (stabilised)	CAS No.: 7429-90-5 EC No.: 231-072-3 REACH Reg. No.: 01-2119529243-45-0044		~ 5 %
Distillates (petroleum) , hydrotreated heavy naphthenic	CAS No.: 64742-52-5 EC No.: 265-155-0 REACH Reg. No.: 01-2119467170-45-0002		2 - 4 %
Emulsifier		Aquatic Chronic 3; H412;	1 - 2 %
Remarks, substance	Kemix A contains aluminium powder.		
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. Contact physician if discomfort continues.
Ingestion	Immediately rinse mouth and drink plenty of water (200-300 ml). Immediately call a POISON CENTER or doctor/physician.

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	When heated and in case of fire, toxic vapours/gases may be formed. May explode when heated or when exposed to flames or sparks.
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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.

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
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aluminum). Place into marked, sealable containers and dispose of as required by the authorities.

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. 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 Store locked up. Store in a dry place. Keep cool. Protect from sunlight.
 The Kemix-pipecharge boxes must be stored in horizontal position.
 National regulations must be followed with handling and storage.

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/m³

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 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 in plastic tubes.

Colour White - yellowish (Kemix)
Metallic gray (Kemix A)

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: > 180 °C Comments: The flash point of the oil contained in the product.
Evaporation rate	Comments: Not relevant.
Flammability (solid, gas)	Not determined.
Vapour pressure	Comments: Not relevant.
Vapour density	Comments: Not relevant.
Specific gravity	Value: ~ 1,2 g/cm ³
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 combustibility	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.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No dangerous reactions known under conditions of normal use.

10.2. Chemical stability

Stability Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known under normal storage and handling conditions.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Materials to avoid Strong alkalis. Strong acids. Reducing agents and organic materials. Do not let foreign materials get mixed in the product.

10.6. Hazardous decomposition products

Hazardous decomposition products During fire, toxic gases (CO, CO₂, NO_x, NH₃) are formed.

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>

Substance	Distillates (petroleum), hydrotreated heavy naphthenic
Acute toxicity	<p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Oral Value: > 5000 mg/kg Animal test species: Rat</p> <p>Type of toxicity: Acute Effect tested: LD50 Route of exposure: Dermal Value: > 2000 mg/kg Animal test species: Rabbit</p> <p>Type of toxicity: Acute Effect tested: LC50 Route of exposure: Inhalation. Duration: 4 h Value: > 5,53 mg/l Animal test species: Rat</p>

Other information regarding health hazards

Irritation	Causes 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	Value: 447 mg/l Test duration: 48 h Method: LC50 Test reference: IUCLID 5
Substance	Distillates (petroleum), hydrotreated heavy naphthenic
Acute aquatic, fish	Value: > 100 mg/l Test duration: 96 h Method: EC50
Substance	Ammonium Nitrate
Acute aquatic, algae	Value: > 1700 mg/l Test duration: 10 d Method: EC50 Test reference: IUCLID 5
Substance	Distillates (petroleum), hydrotreated heavy naphthenic
Acute aquatic, algae	Value: > 100 mg/l Test duration: 48 h Method: IC50
Substance	Ammonium Nitrate
Acute aquatic, Daphnia	Value: 490 mg/l Test duration: 48 h Method: EC50 Test reference: IUCLID 5
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 Lubricating oil: not readily degradable (OECD 301B).
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12.3. Bioaccumulative potential

Bioaccumulation, evaluation	Ammonium nitrate: not bioaccumulative (LogPow <1) Base oil hydrocarbons: 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.

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
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.

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

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture**

Comments For professional users only.

15.2. Chemical safety assessment

CSR required No

SECTION 16: Other information

List of relevant H-phrases (Section 2 and 3) H201 Explosive; mass explosion hazard.
H272 May intensify fire; oxidiser.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

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 4

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.