

Fertilizer type: Ammonium sulfate nitrate

MATERIAL SAFETY DATA SHEET

SECTION 1.IDENTIFICATION OF THE MIXTURE AND IDENTIFICATION OF THE COMPANY 1.1. **PRODUCT IDENTIFIER** Saletrosan® 30 Trade name Other methods of identification Fertilizer type: Ammonium sulfate nitrate (ASN) Agricultural fertilizer 1.2. **RELEVANT IDENTIFIED** (Use no. 10-18 acc. to the Ammonium Nitrate CSR) USES OF THE MIXTURE The fertilizer contains over 16% of nitrogen expressed as the ratio of the nitrogen AND USES ADVISED AGAINST weight to ammonium nitrate - see section 15. Uses advised against - incompatible with intended use. Grupa Azoty S.A. DETAILS OF THE SUPPLIER OF THE 1.3. 33-101 Tarnów, ul. E. Kwiatkowskiego 8 SAFETY DATA SHEET tel:+4814 633 07 81 ÷ 85 Fax +48 14 633 07 18 Contact data of the person responsible for the MSDS: tb@grupaazoty.com Rescue services:112 1.4. EMERGENCY TELEPHONE NUMBER Grupa Azoty S.A. Substantive Assistance + 48 14 637-21-00, 637-31-00 Available 24/7

SECTION 2. IDENTIFICATION OF HAZARDS

2.1 MIXTURE CLASSIFICATION

Classification 1272/2008/EC:

The product ingredients are not listed in the Regulation of the European Parliament and of the Council (EC) of 16 December 2008 on classification, labelling and packaging of substances and mixtures; however, based on the Chemical Safety Report for ammonium nitrate, the product has been classified as an Eye Irritant (cat. II) H319 - irritating to eyes; oxidation product (cat.III) H272 - May intensify fire; oxidizer.

2.2 LABEL ELEMENTS

Labelling according to the Regulation (EC) No. 1272/ 2008

Hazard pictograms and signal word:



Hazard statements:

H272 - May intensify fire; oxidizer.

H319 - Causes serious eye irritation.

Precautionary statements:

Prevention:

(P210) - Keep away from heat/sparks/open flames/hot surfaces - No smoking.

(P221) - Take all precautions to avoid mixing with other combustible materials.

(P264) - Wash hands thoroughly after handling.

(P280) - Use protective gloves / eye protection.

(P305 + P351 + P338) - if in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. (P337 + P313) - If eye irritation persists: Get medical advice/attention.

(P307 + P312) - if swallowed: Call a POISON CENTRE/doctor if you feel unwell.

Date of preparation:29/05/2017

Date of revision:07/11/2018

Revision update number: 1/2018

Page1 of 10



Fertilizer type: Ammonium sulfate nitrate

2.3 OTHER HAZARDS

Ammonium nitrate is a strong oxidant. It supports smoking as a source of oxygen. This substance is unstable during heating decomposes with the release of heat and toxic gases: NOx, NH3. It is an unstable substance during heating, decomposes with the release of heat and toxic gases: NOx, NH3. Bismuth, cadmium, copper, molybdenum, lead, nickel, zinc, reduce ammonium nitrate to form ammonium nitrite - an unstable compound that increases the possibility of explosion. Contaminated ammonium nitrate may in extreme cases cause an explosion. Small amounts of mercury, chromates, permanganates, sulphides and chlorides are dangerous. The danger of poisoning by skin contact or inhalation is small. Readily absorbed by the alimentary tract (with partial reduction in the stomach and the intestines to more toxic nitrite).Small doses do not cause effects. Large doses are irritating to the alimentary tract mucous membranes; gastrointestinal disorders may occur resulting in nausea, vomiting and diarrhoea, with systemic formation of methaemoglobin.

Avoid contact with dolomite nitro-chalk dust. Avoid release to drinking water intakes, sewage or soil. Water contaminated with ammonium nitrate is not suitable for drinking.

Substance does not meet the PBT or vPvB criteria.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Name of the substance	Content [%]	Registration No.	EC/CAS no.	Classification according to Regulation (EC) No. 1272/2008 (CLP):
Ammonium nitrate	65 to 69	01-21194990981-27- 0041	229-347-8; 6484-52-2	Eye Irrit.2 H319, Oxid.Solid3 H272
Ammonium sulphate	27 to 29	01-2119455044-46- 0040	231-984-1; 7783-20-2	Not listed
Anti-caking agent	0.15 to 0.35	-	-	No effect on classification

Chemical composition of products:

The basic components of the mixture are: ammonium nitrate and ammonium sulphate. The water content is up to 0.8%. Depending on the type of fertilizer, additives may be used to improve the product's properties and its suitability as a mineral fertilizer, not being dangerous substances.

SECTION 4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

INHALATION

Immediately remove the victim from the contaminated area. Provide fresh air. If nitrogen oxide poisoning is suspected (even if no symptoms are evident), immediately take the victim to a hospital.

INGESTION

Give plenty of water with milk to drink. Induce vomiting. Immediately call a doctor.

AFTER CONTACT WITH SKIN

Wash with plenty of water and immediately remove contaminated clothes. If skin irritation persists, consult a dermatologist.

AFTER CONTACT WITH EYES

Rinse with plenty of water for a minimum of 10 minutes while holding the eyelids wide open. Consult a ophthalmologist.

FIRST AID MEASURES

Immediately remove contaminated clothes, provide fresh air and medical help. Thoroughly wash the skin with

water and soap at the point of contact.

If in eyes: Rinse immediately with running water for a minimum of 15 minutes while holding the eyelids wide open. Consult a ophthalmologist.

If swallowed: Immediately seek medical attention. Ammonium nitrate is toxic if swallowed.

Date of preparation:29/05/2017 Date of revision:07/11/2018

Revision update number: 1/2018

Page2 of 10



Fertilizer type: Ammonium sulfate nitrate

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

Eye irritation may occur as an effect of eye exposure to the product.

4.3 INDICATIONS OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No data.

SECTION 5.FIRE-FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

Ammonium nitrate alloy and nitrate fertilizers are not flammable. In the case of fire, ammonium nitrate must be intensely cooled with water sprays or, if possible to do so, removed from the range of fire. Firefighters should use proper respiratory protection, because ammonium nitrate may, if heated, decompose into nitrogen oxides and ammonia.

SUITABLE EXTINGUISHING MEDIA:

The only effective method for ceasing decomposition or fire is to use large amounts of water to cool and dissolve the substance. Other extinguishing media have little effect.

UNSUITABLE EXTINGUISHING MEDIA:

Do not use coherent jets of water on the surface of the substance on fire. DO NOT USE: chemical extinguishers, foam extinguishers, steam or sand on decomposing fertilizers.

5.2 SPECIAL HAZARDS ARISING FROM THE MIXTURE

Ammonium nitrate is the main ingredient of the fertilizer, a strong oxidizer and a non-flammable substance which still can support the combustion process. When heated and with inhibited heat transmission to the environment, exothermal decomposition may occur. When decomposing in closed spaces, the substance has a high explosive potential. Fire produces hazardous vapours, ammonia and nitrogen oxides. Cool the containers exposed to fire or high temperature with water, and remove them from the hazardous area if possible to do so.

5.3 INFORMATION FOR FIREFIGHTERS

If high concentrations of vapours and dust are present, use self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

6.1.1 For non-emergency personnel

Avoid contact with fertilizer dust. Wear protective clothes, protective gloves and - if dust is present - respirators.

6.1.2 For emergency personnel

Avoid contact with fertilizer dust. Wear protective work clothes, protective gloves and - if dust is present - respirators; see Section 4.

6.2 ENVIRONMENTAL PRECAUTIONS

Prevent contamination of underground waters. Do not flush into drains. Secure drains. Immediately notify the relevant authorities about any water contamination.

6.3 METHODS AND MATERIALS FOR CONTAMINATION CONTAINMENT AND CLEANING UP

6.3.1 Small spills or leaks: pump out or collect the product and place in a dedicated and labelled containers for waste. Clean the contaminated surfaces with plenty of water. Do not collect the spilled product with sawdust or other flammable materials.

6.3.2 Large spills or leaks: pump out or collect the product and place in a dedicated and labelled containers for waste. Transfer for recovery. Clean the contaminated surfaces with plenty of water. Immediately notify the relevant authorities if large amounts of the spilled substance enter surface waters.

6.3.3 Do not collect the spilled product with sawdust or other flammable materials.

6.4 REFERENCES TO OTHER SECTIONS

See also Sections 8.2 and 13.

Date of preparation:29/05/2017 Date of revision:07/11/2018

Revision update number: 1/2018

Page3 of 10



Fertilizer type: Ammonium sulfate nitrate

SECTION 7. HANDLING AND STORAGE OF MIXTURES

See also Section 8 for relevant information.

7.1 PRECAUTIONS FOR SAFE HANDLING

Saletrosan - mineral fertilizer - use as intended.

7.2 CONDITIONS FOR SAFE STORAGE INCLUDING THE INFORMATION CONCERNING ANY MUTUAL INCOMPATIBILITIES

Protect from water, rain, snow, direct sunlight or heating to over 30 °C; store separately from flammables and reacting chemicals (see Section 10).

Store in clean and dry storage buildings, which are protected from ingress of moisture from the ground. Due to the low resistance of the product to direct sunlight, rain, snow and temperature changes, the product must not be stored under canopy roofs or in openair yards. Eliminate all ignition sources and do not use open flame. Do not smoke. Keep the fertilizer away from all heat sources, e.g. heating systems, steam or hot water manifolds, or any heat-emitting electrical systems. Electrical wiring must be protected against shorting. All equipment and devices in the same storage shall be in good technical condition. Do not use any devices which leak fuel, oil or lubricants. The rooms must be empty of all flammables and materials which may react with the fertilizer, especially coal, wood, sawdust, oils, lubricants, propellants, pesticited, urea fertilisers and any other substances which contain chlorides, acids, alkalis, powdered metals, or metal oxides. Store damaged fertilizer bags separately.

Leave clearance between the stacks to allow free approach with internal handling machines. Flexible fertilizer containers with a weight below 500 kg can be stacked in a maximum of 2 layers. Store larger containers in single layer only. Lay 50 kg bags flat and in up to 10 layers only.

Keep the storage facilities secured against unauthorised access. The fertilizer bags shall be suitably labelled for easy identification.

7.3 SPECIFIC END USE(S)

The product is used as a fertilizer. See Section 1.2

SECTION 8. EXPOSURE CONTROL/ PERSONAL PROTECTIVE EQUIPMENT

8.1.CONTROL PARAMETERS

Substance	NDS (TWA)	NDSCh STEL (maximum allowable short-term concentration)	NDSP (maximum allowable ceiling concentration)
Other non-toxic industrial particulates, also including free (crystalline) silica at <2%	10 mg/m ³	not determined	not determined

See also Section15.1 item 15.

DNEL

Workers: long-term exposure - systemic effects		
Indicator	unit	
DNEL worker (skin)	mg/kg	21.3
DNEL worker (inhalation)	mg/m³	37.6
Population: long-term exposure - systemic effects		
DNEL population (skin)	mg/kg	12.8
DNEL population (inhalation)	mg/m ³	11.1
DNEL population (oral)	mg/kg	12.8

PNEC:

No data.

Date of preparation: 29/05/2017	
---------------------------------	--



Fertilizer type: Ammonium sulfate nitrate

8.2.EXPOSURE CONTROLS

8.2.1 Appropriate engineering controls This information complements Section 7.

Work stations in indoor facilities shall be ventilated. Follow the general industrial OHS regulations. Work station dust concentration levels shall be measured.

8.2.2 Individual protection devices, such as personal protective equipment:

- a) Eye and face protection safety goggles
- b) Skin protection hand protection obligatory work clothing and protective gloves
- c) Respiratory protection obligatory, use masks if dust is present
- d) Thermal hazards Not applicable

8.2.3 Environmental exposure controls

Measure the concentration levels and monitor the sewage discharge. Do not introduce into the environment in quantities larger than defined in legal provisions and official decisions.

Acceptable pollution of inland surface waters:

Ammonium nitrogen I Purity class - 1.0 mg N-NH₄/l II Purity class - 3.0 mg N-NH₄/l III Purity class - 6.0 mg N-NH₄/l

Nitrate nitrogen

I Purity class - 5.0 mg N-NO₃/l II Purity class - 7.0 mg N-NO₃/l

III Purity class - 15.0 mg N-NO₃/l

PNEC - for fresh waters 0.45 mg/l PNEC - for sea waters 0.045 mg/l PNEC - for short-term exposure 4.5 mg/l PNEC - for microorganisms in water treatment plants 18 mg/l

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Solid - brown or beige granules (or brick-red - Saletrosan [®] 26 plus)
ODOUR	None, or ammonia
ODOUR THRESHOLD	No data
PH	(water solution of 10g/100 ml)> 4.5
MELTING/FREEZING POINT	160-170 °C (for ammonium nitrate)
INITIAL BOILING POINT AND BOILING TEMPERATURE RANGE	210 °C at 11 mmHg for pure ammonium nitrate
FLASH POINT	Non-flammable
EVAPORATION RATE	No data
FLAMMABILITY (solid, gas)	Non-flammable
UPPER/LOWER	No data
FLAMMABILITY OR	
EXPLOSIVE LIMITS	
VAPOUR PRESSURE	No data
VAPOUR DENSITY	Approx.2.8 (for ammonium nitrate) (air: 1)

Date of preparation: 29/05/2017

Page5 of 10



Fertilizer type: Ammonium sulfate nitrate

RELATIVE DENSITY	No data
SOLUBILITY	Readily soluble in water, 1900 g/l (at 20 °C for ammonium nitrate)
PARTITION COEFFICIENT n-octanol/water	No data available (inorganic chemical)
AUTO-IGNITION	Not applicable.
TEMPERATURE	
DECOMPOSITION	> 210°C
TEMPERATURE	
VISCOSITY	No data
EXPLOSIVE PROPERTIES	No explosive properties
OXIDISING PROPERTIES	Strong oxidizer (ammonium nitrate)

9.2.OTHER INFORMATION

None

SECTION 10.STABILITY AND REACTIVITY

10.1 REACTIVITY

The fertilizer has no oxidizing properties. Reactions with combustible and reducing materials.

10.2 CHEMICAL STABILITY

Saletrosan is stable provided that the storage conditions follow Section 7.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Hazardous reactions with the substances listed in Section 10.5 is possible. At high temperatures, the product may decompose into nitrogen oxides and ammonia.

10.4 CONDITIONS TO AVOID

The substance sustains combustion and oxidation. Fire and explosion hazards are elevated by high temperature, high pressure, hermetic rooms, presence of organic substances, catalytic effects and strong detonators.

10.5 INCOMPATIBLE MATERIALS

Steel, powdered metals, alkalic metals, metal oxides, non-metals, carbides, flammable substances, nitrides, lyes, acids, ammonium compounds, organic substances, chlorates, powdered aluminium, sulfides, sawdust, propellants, oils and lubricants, straw; Incompatible working materials: metals, steel. When humid, the product may corrode metals.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

Nitrogen oxides and ammonia; when heated above 280 °C, the product may decompose rapidly with emission of ammonia, sulphur trioxide, as well as corrosive and toxic gases.

SECTION 11.TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

The substance has not been classified as toxic. Inhalation of dust at high concentration causes coughing and throat ache. Irritant to the skin, may cause sensitization. Contact with skin causes itching. Contact with the eyes causes reddening and pain. In oral poisoning, the substance is readily absorbed by the alimentary tract (with partial reduction in the stomach and the intestines to more toxic nitrite).Irritating to the alimentary tract mucous membranes. Very high oral doses cause vertigo, abdominal pains, vomiting and fatigue.

Acute toxicity:

LD₅₀ > 2000 mg/kg (for ammonium nitrate (V))

Large quantities of the substance (dust) creates methaemoglobin, cardiac arrhythmia, headache, and lower blood pressure; the decomposition products may result in respiratory swelling.

Date of preparation:29/05/2017 Date of revision:07/11/2018

Revision update number:1/2018

Page6 of 10



Fertilizer type: Ammonium sulfate nitrate

LD50 (ingestion):2950 mg/kg bw LD50 (skin):5000 mg/kg bw Acute toxicity by inhalation is not assessed because the vapour pressure of the substance is too low, whereas the ammonium nitrate particle size prevents any potential for absorption by pulmonary alveoli.

skin corrosion/irritation;

The substance is not caustic.

Serious eye damage/eye irritation:

Eye irritant (H319), an irritation symptom is reddening of the eyes.

<u>Respiratory/skin sensitisation:</u>

Skin: No sensitizing effect Respiratory: no data available.

<u>Germ cell mutagenicity:</u>

Genotoxicity: negative.

 <u>Carcinogenicity:</u> Not classified as carcinogenic.

There is certain evidence of potential formation of n-nitrous compounds in food and tissues which contain excess nitrates/nitrides. N-nitrous compounds are known to be potentially mutagenic/carcinogenic. The saliva bacteria decompose nitrates into a harmless acid.

Reproductive toxicity:

No data available for ammonium nitrate.

Specific target organ toxicity - single exposure:

No data.

Specific target organ toxicity - repeated exposure:

1) Repeated dose toxicity: oral

No tests are available for the repeated dose toxicity of ammonium nitrate NOAEL KNO3:256 mg/kg of body weight

- 2) Repeated dose toxicity: inhalation NOAEC:185 mg/m³
- 3) Repeated dose toxicity: skin No skin test.
- Aspiration hazards:

No data.

Potential routes of exposure and delayed, direct and chronic short- and long-term effects:

Not available.

SECTION 12. ECOLOGICAL INFORMATION

12.1 TOXICITY

Ammonium sulfate nitrate (ASN) is used as a mineral fertilizer. It is a local hazard with a consequence of entering water. Toxic to aquatic organisms. Excessive drain into waters causes their eutrophication. The ammonium salt toxicity to fish is lower than of free ammonia, yet with similar symptoms. Ammonium nitrate at 500 mg/dm³ is lethal to the carp.

Toxicity to fish, aquatic invertebrates, algae and cyanobacteria, non-algae aquatic plants and microorganisms

LC50/48h fish: Cyprinus carpio 447 mg/l; short-term

EC50/24h/48h Shellfish: Daphnia magna 490 mg/l; short-term

EC50/10d KNO3 test for Algae: numerous phytobenthos diatoms >1700 mg/l

Date of preparation:29/05/2017

Revision update number: 1/2018

Page7 of 10



Fertilizer type: Ammonium sulfate nitrate

12.2 PERSISTENCE AND DEGRADABILITY

When diluted and after a long time, ammonium nitrate is biologically destroyed, i.e. absorbed as a fertilizer by plants. Ammonium salts are decomposed in the aquatic environment and emit ammonia gas. The dissociation level depends on pH and temperature.

12.3 BIOACCUMULATION POTENTIAL

Simple inorganic salts that are readily soluble in water in aqueous solutions occur in their dissociated form. The substances have a low bioaccumulative potential.

12.4 MOBILITY IN SOIL

Readily soluble in water. Prevent escape into drinking water intakes, sewage or soil. Water contaminated with ammonium nitrate is not suitable for drinking.

12.5 RESULTS OF PBT AND VPVB CHARACTERISTICS ASSESSMENT

Pursuant to Annex XIII of the Regulation (EC) No. 1907/2006, the PBT (persistence, bioaccumulative and toxicity) and vPvB (very persistent and very bioaccumulative) have not been assessed, because ammonium nitrate is inorganic.

12.6 OTHER ADVERSE EFFECTS

High levels of nitrates in water causes a fast growth of algae and reduction of oxygen in water (eutrophication).

SECTION 13.WASTE HANDLING

13.1 WASTE TREATMENT METHODS

DESCRIPTION OF POSSIBLE WASTE

Spent product containers. Soil and water contaminated with the substance, and other materials used to absorb the substance after a failure or an accident.

GENERAL WASTE HANDLING RULES

If waste is generated during transport or unloading (loading), collect the spilled product into non- flammable containers, and if the product is not mixed with flammable substances, release for use as a fertilizer. If the product is mixed with flammable substances, dissolve it in water and use the solution as a fertilizer. Prevent contamination of underground waters.

WASTE TREATMENT

product - should be used as a fertilizer, packaging - should be removed as indicated on the packaging.

According to the regulations in Section 15.1.

SECTION 14.TRANSPORT INFORMATION

Transport of goods in packaging and in bulk is allowed. Based on the composition of the mixture and the test in terms of resistance to detonation in accordance with the Manual of Tests and Criteria, the product is classified as subject to the provisions of RID and ADR as below:

14.1 UN NUMBER: UN 2067

14.2. UN PROPER SHIPPING NAME Ammonium nitrate fertilizer

14.3 TRANSPORT HAZARD CLASS: 5.1

14.4 PACKING GROUP:III

14.5 ENVIRONMENTAL HAZARDS: Not applicable

14.6 SPECIAL PRECAUTIONS FOR USERS:

The fertilizer carried on transport vehicles shall be protected against water, rain and snow, direct sunlight, contact with organic materials and damage to the product containers.

14.7 TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE: Not applicable

Date of preparation:29/05/2017

9/05/2017 Date of revision:07/11/2018

Revision update number: 1/2018

Page8 of 10



Saletrosan[®] 30 Fertilizer type: Ammonium sulfate nitrate

OTHER INFORMATION:

LABELLING/MARKING:

RID, ADR, IMDG: Sticker No. 5.1, orange colour plate 50/2067



Applies to transport in tankers

ICAO/IATA: Not applicable

CLASSIFICATION CODE (ADR/RID): 02 TANK CAR CODE/ special ADR requirements: SGAV HAZARD IDENTIFICATION NUMBER: 50 Tunnel restriction code: E HAZARD IDENTIFICATION NUMBER: 50

SECTION 15. INFORMATION ON LEGAL REGULATIONS

Ammonium nitrate is listed in Appendix II to EC Regulation No. 98/2013 on the marketing and use of explosives precursors. All suspicious transactions and their attempts, disappearances and thefts should be reported to the National Focal Point.

The sale of ammonium nitrate and mixtures containing ammonium nitrate in a concentration of at least 16% - expressed as the ratio of nitrogen to ammonium nitrate - to the average users (including consumers, i.e. persons who do not run a business, agricultural activities) is illegal, in accordance with item 56 of the REACH regulation - item 15.1.1 of the Safety Data Sheet.

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE MIXTURE

- 1. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), (OJ EU L 396, 30/12/2006, as amended).
- 2. Polish Act of 25 February 2011 on chemical substances and mixtures (Polish Journal of Laws No. 63 item 322, as amended, including amendment of 20 March 2015 Polish Journal of Laws 2015, item 675),
- 3. Polish Act of 27 April 2001 Environmental Protection Law (Polish Journal of Laws No. 62 item 627, as amended).
- 4. Polish Act of 14 December 2012 on waste (Polish Journal of Laws No. 2013 item 21, as amended).
- 5. Polish Regulation of the Ministry of Health of 10 August 2012 on the classification criteria and methods for chemicals and mixtures (consolidated text in the Ministry of Health Declaration of 12 January 2015, Polish Journal of Laws, item 208).
- 6. Polish Regulation of the Ministry of Health of 20 April 2012 on labelling of packaging of dangerous substances and mixtures and certain mixtures (consolidated text in the Ministry of Health Declaration of 2 March 2015 concerning the Declaration of the consolidated text of the Ministry of Health Regulation on labelling of packaging of dangerous substances and mixtures and certain mixtures, Polish Journal of Laws, item 450).
- 7. Regulation of the Minister of Health of 25 August 2015 concerning labelling of sites, pipelines, containers and vessels utilised for storage or containing hazardous substances or mixtures (Polish Journal of Laws 2015, item 1368),
- 8. Polish Act of 19 August 2011 on the transport of hazardous goods (Polish Journal of Laws No. 227 item 1367, as amended).
- Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006 (OJ UE 31.12.2008, as amended),
- 10. Polish Regulation of the Ministry of Labour and Social Policy of 12 June 2018 on the maximum permissible concentrations and intensities of hazardous factors in the work environment (Polish Journal of Laws, 2018, item 1286 as amended).
- 11. Polish Act of 13 June 2013 on managing waste and waste packaging (Polish Journal of Laws 2013, item 888, as amended).
- 12. Regulation of the European Parliament and of the Council (EC) No. 98/2013 of January 15, 2013 on the marketing and use of explosives precursors (Official Journal L39 of 09/02/2013), as amended.
- 13. Act of 13 April 2016 on the safety of trading of explosives precursors (Journal of Laws of 2016, item 669).

Date of	preparation:29/05/2017	
---------	------------------------	--

Date of revision:07/11/2018

Revision update number: 1/2018

Page9 of 10



Fertilizer type: Ammonium sulfate nitrate

15.2 CHEMICAL SAFETY ASSESSMENT

The assessment of ammonium nitrate has been prepared in the CSA supplied to ECHA under a joint registration, reference: IS-Amonium-Nitrate-6484-52-2.

SECTION 16. OTHER INFORMATION

Information contained in this card along with the attachments are in line with our best knowledge as of the date of its update. Information contained in it should be treated only as a guideline in relation to the activities and processes being the subject of individual sections of the card.

CHANGES INTRODUCED IN RELATION TO THE PREVIOUS VERSION OF THE MSDS. Products update.

EXPLANATION OF ABBREVIATIONS AND ACRONYMS USED IN THE MATERIAL SAFETY DATA SHEET

CSR Chemical Safety Report EC50 Effective concentration 50% LC 50 Lethal concentration 50% LD50 Lethal dose of 50% NOAEL No Observable Adverse Effect Level of a tested dosage NOAEC The highest concentration of the substance at which no harmful change is detectable during the tests, PBT persistence, bioaccumulation and toxicity, REACH Registration, Evaluation and Authorization of chemicals, vPvB high persistence and high bioaccumulation

REFERENCES TO KEY LITERATURE AND DATA SOURCES

This MSDS has been prepared from the relevant CSR and experimental and theoretical data.

FURTHER INFORMATION

Corporate Commercial Department Agro Segment Sales Department: tel.014/637 37 35 fax.014/637 27 23 Technologist: tel.014/637 42 11

LIST OF RELEVANT R-PHRASES AND/OR PRECAUTIONARY STATEMENTS

Described in section 2

RECOMMENDATIONS FOR INDICATED TRAININGS

Before attempting to work with the product, the user should understand the OHS rules for handling the substance.

END OF MATERIAL SAFETY DATA SHEET