SECTION 1: IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/ UNDERTAKING.

1.1 Product identifier

Trade name:	AUSTROGEL P
UFI	2J10-2056-0003-RJ8S

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

Products intended for use in underground and open-pit mines, tunnel drilling and demolition works. It is **forbidden** to use the products in conditions of firedamp and/or coal dust explosion hazard.

1.3 Details of the supplier of the safety data sheet

Company name:	NITROERG S.A.	
Address:	pl. Alfreda Nobla 1 43-150 Bieruń Poland	
Production plant:	ul. Zawadzkiego 1 42-693 Krupski Młyn Poland	
Contact number:	Krupski Młyn	(+48) 32 46 62 103
Fax:	Krupski Młyn	(+48) 32 46 62 100
E-mail:	sds@nitroerg.pl	

1.4 Emergency telephone number

NITROERG S.A.	+48 32 46 62 000 (6^{00} – 15^{00}, from Monday till Friday)
Police	Depends on the country.
Fire brigade	Depends on the country.
Ambulance services	Depends on the country.
Emergency services	112, 911 or 999 (from mobile).

Emergency numbers are depends on your country.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Expl. 1.1 H201	Explosive, subclass 1.1
Eye. Irrit. 2 H319	Eye irritating, cat. 2.
Acute Tox. 2 H300	Acute Toxicity, cat. 2
Acute Tox. 1 H310	Acute Toxicity, cat. 1
Acute Tox. 2 H330	Acute Toxicity, cat. 2
STOT RE 2 H373	Specific target organ toxicity – repeated exposure, cat. 2 May cause damage to organs (blood system) through prolonged or repeated inhalation and dermal exposure.
Aquatic Chronic 3 H412	Chronic toxicity hazard to auquatic life, cat. 3.

Full meaning of H- and P-phrases in sections 2 -15: see SECTION 16.

2.2 Label elements

Hazard pictogram(s):

Signal word: **DANGER**

H-phrase(s):	H201	Explosive; mass explosion hazard.
P-phrase(s):	P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	P250	Do not subject to grinding/shock/friction.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.

P-phrase(s):	P370+P372+P380+P373	In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.
	P234	Keep only in original packaging.
UFI:	2J10-2056-0003-RJ8S	
Contains:	Nitroglycerin, ethylene glycol dinitrate, ammonium nitrate.	

2.3 Other hazards.

The mixture may undergo explosive decomposition above or equal to 160 °C. During the heating and combustion, highly toxic carbon monoxide and nitrogen oxides are created. Fire may occur as a secondary effect of unintended detonation of the product. The mixture and its components are not classified as PBT and vPvB and are not classified as as having endocrine disrupting properties.

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Name:	Nitroglycerine	Ethylene glycol dinitrate
IUPAC name:	1,2,3-Trinitroxypropane	1,2-dinitroxyethane
EC number:	200-240-8	211-063-0
CAS number:	55-63-0	628-96-6
Registration number:	01-2119488893-18-XXXX	01-2119492860-31-XXXX
Classification:	Unst. Expl.; H200	Unst. Expl.; H200
	Acute Tox. 2; H300	Acute Tox. 2; H300
	Acute Tox. 1; H310	Acute Tox. 1; H310
	Acute Tox. 2; H330	Acute Tox. 2; H330
	STOT RE 2; H373	STOT RE 2; H373
	Aquatic Chronic 2; H411	-
Concentration [%]:	16,8 ÷ 19,2	11,2 ÷ 12,8

EU limit values:	0,095 mg/m^3 (8 hours)	No data.
	0,19 mg/m^3 (short-term)	
Name:	Ammonium nitrate	Ethylene glycol
IUPAC name:	Ammonium nitrate	Ethane-1,2-diol
EC number:	229-347-8	203-473-3
CAS number:	6484-52-2	107-21-1
Registration number:	01-2119490981-27-XXXX	01-2119456816-28-XXXX
Classification:	Ox. Sol. 3; H272	Acute Tox. 4; H302
	Eye Irrit. 2; H319	STOT RE 2; H373
Concentration [%]:	60,0 ÷ 68,0	c < 0,50
EU limit values:	No data.	52 mg/m^3 (8 hours)
		104 mg/m^3 (short-term)

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

- **Inhalation poisoning**

Call medical assistance if any alarming symptoms occur, the injured person should be moved to fresh air and kept at rest. The products of thermal decomposition and detonation are highly toxic. In case of intoxication with those products, remove the person from the place of exposure and call medical service.

- **Skin contamination**

Take off clothes and wash contaminated skin with running water with soap. In case of skin changes or malaise, contact a call medical service.

- **Eye contamination**

Rinse cautiously with large amount of running water for several minutes (avoid strong stream of water due to the risk of mechanical damage to the eye). Consult a physician.

- **Ingestion poisoning**

Call a medical service. Immediately after ingestion give the injured person plenty of water to drink and activated charcoal if possible. Try to induce vomiting.

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

SYMPTOMS	ROUTE OF EXPOSURE	EFFECTS
Acute	Inhalation	Blood vessel dilation, blood pressure drop, headache, mental breakdown, loss of consciousness.
	Skin	Skin changes (irritation); absorption through skin gives similar symptoms as in intoxication by inhalation.
	Eyes	Lacrimation, eyes reddening.
	Oral	Irritation of mucous membranes of lips, esophagus and gastrointestinal tract. Other symptoms are similar as in intoxication by inhalation.
Delayed	Inhalation	Repeated or prolonged exposure to vapours of nitroglycerine and nitroglycol mixture may cause inurement. Slightly increased level of methemoglobin in blood may persist and so may changes in the nervous system and blood vessels, tremors and neurological pains, digestion disorders.
	Skin	Chronic allergic reactions and skin inflammations.

4.3 Indication of any immediate medical attention and special treatment needed

The symptoms may not occur instantaneously, therefore the injured person should be observed for 48h. If breathing disorders occur intubate, apply CPR with oxygen. If arterial blood pressure drops considerably, administer liquids intravenously (5% glucose, 0.9% NaCl or Dextran 40000 or alternatively dopamine in intravenous drop). Transport to hospital in a resuscitation ambulance without discontinuing the treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable:	If the fire has not reached the product, use suitable extinguishing media and methods, prevent the fire from spreading onto the product.
Unsuitable:	Do not use water near the electrical equipment and installations.

5.2 Special hazards arising from the substance or mixture

Do not attempt to extinguish fire if it has covered the product due to explosion risk and fragmentation risk. Highly toxic nitrogen oxides and carbon oxide are created during thermal decomposition of the product.

5.3 Advice for firefighters

Do not attempt to extinguish fire if it has covered the product. Withdraw from the endangered area and let the material to burn out. In case of fire use autonomic breathing apparatus together with gas-tight clothing, compliant with EN469 standard. Immediately evacuate all personnel from the endangered area. Use all the natural protection and covers, avoid direct contact with the location of the accident and order people to move away from the windows. Stop all the traffic and close the danger zone. Evacuate unnecessary personnel.

In case of fire of the mean of transport, disconnect the tractor from the trailer and move the tractor to a safe place (if possible). In case of fire of the wagon, disconnect it from the rest of the carriage and move it to a safe place (if possible).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- **For non-emergency personel**

Not required. People who do not participate in failure handling should gather in an indicated place, away from the failure.

- **For emergency responders**

Use personal protection measures described in SECTION 8.

6.2 Environmental precautions

Inform the surroundings about the failure. Secure the explosive and area of the accident against unauthorized personnel.

6.3 Methods and material for containment and cleaning up

- **Removing contamination**

In case of accidental release into environment:

Small quantities:	Remove all potential ignition sources (extinguish open fire, announce smoking ban). Avoid inhalation of fumes. If the packaging was damaged, carefully collect the scattered product (avoid sparking) and place it in a tight container (e.g. PE bag). While removing the failure use protection gloves. Dispose the explosive waste according to SECTION 13.
Large quantities:	In case of serious failure or danger, call emergency services. Do not allow the mixture to penetrate to sewage systems, surface and ground waters.

6.4 Reference to other sections

Personnal protection measures: see SECTION 8.

Waste disposal: see SECTION 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not eat, drink or smoke during handling the product. Follow the GHP and GMP rules. Use personal protection measures. Work in dry, well ventilated places to protect the product from dampness. Ensure the cleanliness of means of transport. Avoid mechanical shock, friction, high temperatures or any energetic stimuli which may cause detonation. Protect the product from adverse weather conditions (excessive lightning, rain, lightning, etc.)

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:	Store in a cool, dry, well-ventilated places, away from all sources of ignition and incompatible materials in the temperature range 0 °C ÷ 30 °C. The material should be stored in original packaging.
Packaging:	Paper, film, plastic tube.
Requirements concerning the storage:	According to national/local regulations on storage of explosives.
Storage with other materials:	Strictly with other class 1 materials, compatibility group C, D, E, G, N and S (according to ADR regulation).
Acceptable quantity:	Strictly defined by local and/or national regulations.

7.3 Specific end use(s)

None.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

8.1 Control parameters

- **For substance(s), mixture(s) or mixture components listed in SECTION 3.**

COMPONENT	CAS	TLV-TWA	TLV-STEL	TLV-C	BLV:
Nitroglycerin	55-63-0	0,095 mg/m^3	0,19 mg/m^3	-	-
Ethylene glycol dinitrate	628-96-6	0,3 mg/m^3	0,4 mg/m^3	-	-

- **For gaseous toxic compounds created during detonation.**

Substance:		Nitrogen dioxide	Carbon monoxide
CAS/ Registration No.		10102-44-0	630-08-0
Poland	TLV - TWA	0,7 mg/m^3	23 mg/m^3
	TLV – STEL	1,5 mg/m^3	117 mg/m^3
	TLV - C	-	-
EU	TLV-TWA	0,96 mg/m^3 (5 ppm)	23 mg/m^3 (20 ppm)
	TLV-STL	1,91 mg/m^3 (1 ppm)	117 mg/m^3 (100 ppm)
Standard:		PN-Z-04009-11: 2008 PN-Z-04317: 2006	PN-Z-04094-02: 1974 PN-ISO 8760: 1993
BLV:		-	-

- **Legal basis**

The Threshold Limit Value (TLV) of specific substances depends on the country and is regulated by local/ national law. Please keep in mind, that the values given above for these particular chemical compounds, may be different in your country.

- **DNEL**

Nitroglycerin

	EFFECT	ROUTE OF EXPOSURE	DNEL
For workers	Systemic acute	Skin	2,5 mg/kg/day
	Systemic chronic	Skin	0,5 mg/kg/ day

Ethylene glycol dinitrate

	EFFECT	ROUTE OF EXPOSURE	DNEL
For workers	Systemic chronic	Skin	0,06 mg/kg/ day
	Systemic chronic	Respiratory tract	0,085 mg/m^3

- **PNEC**

COMPONENT	TARGET OF ENVIRONMENTAL PROTECTION			
	Saltwater	Sweetwater	Occasional release	Wastewater treatment plant
Nitroglycerin	-	1,98 mg/l	-	-
Ethylene glycol dinitrate	0,0003 mg/l	0,003 mg/l	0,019 mg/l	-

8.2 Exposure controls

- **Appropriate engineering controls**

PN-Z-04008-07: 2002	Air quality protection. Sampling. Principles of sampling in the work environment and interpretation of results.
PN-Z-04466: 2016 -10	Air quality protection. Testing nitroglycerin level in air. Determination of nitroglycerin level at workplace by gas chromatography (GC) with using an electron capture detection.
PN-Z-04212- 02: 1989	Air quality protection. Testing ethylene glycol dinitrate level in air. Determination of ethylene glycol dinitrate level at workplace using gas chromatography.
Ventilation	Using ventilation as a part of GMP.

- **Individual protection measures, such as personal protective equipment**

PROTECTION OF:	PROTECTION MEASURES	STANDARD
Eyes	If there is a risk of exposure - use protective glasses with side shields, cat. II, transparent, made of PC, optical class I or safety goggles class 2.	EN166
Respiratory tract	In case of failure or >TLV - use protective gas mask with organic vapors absorber.	EN149
Skin	Protective clothing (cat. II or III), antielectrostatic.	PN-EN ISO 13688: 2013-12 PN-EN 1149-5
Hands	In the case of direct contact with the product (this means material not elaborated) use protective, gloves made from nitrile, PVC or other gloves approved by the manufacturer for contact with this product. Chemical resistance of the gloves/ level of protection is given by the manufacturer.	EN374 PN-EN 16350

- **Environmental exposure controls**

See subsection 6.2 i 6.3.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Solid (homogeneous ductile mixture)
Colour	Red - brown
Odour	Sweet
Odour threshold	No data available.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	Does not apply.
Flammability	Burning may lead to detonation.
Upper/lower flammability limit or explosion limit	Not applicable.
Flash point	Does not apply.
Auto-ignition temperature	Does not apply.
Decomposition temperature	≥ 160 °C
pH	Undefined.
Kinematic viscosity	Does not apply.
Solubility	Mixture partially soluble in water.
Partition coefficient n-octanol/water (log value)	Does not apply.
Vapour pressure	Does not apply.
Density and/or relative density	1,40 ± 0,14 g/cm^3.
Relative vapour density	Does not apply.
Particle characteristics	Undefined.

9.2 Other information.		
Explosive properties	Impact sensitivity	> 2 J
	Friction sensitivity	≥ 80 N
	Thermal stability	48hrs at 75°C

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

The mixture is sensitive to mechanical, thermal and electric stimuli.

10.2 Chemical stability

Mixture is stable in conditions specified by the manufacturer.

10.3 Possibility of hazardous reactions

High temperature, mechanical shock, friction, static electricity and other energetic may lead to detonation.

10.4 Conditions to avoid

Avoid open fire, high temperature, static electricity, mechanical shock, friction and other energetic stimuli.

10.5 Incompatible materials

Strong acids and bases, reductors.

10.6 Hazardous decomposition products

None.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- **Acute toxicity**

COMPONENT	ORGANISM	LD_{50} or EC_{50}		
		Oral	Skin	Inhalation
Nitroglycerin	rat	105 mg/kg	-	-
	rabbit	-	280 mg/kg	-

Ethylene glycol dinitrate	rat	460 ÷ 616 mg/kg	-	-
	rabbit	-	400 mg/kg	-
Ethylene glycol	rat	7712 mg/kg	3500 mg/kg	2,5 mg/l
	rabbit	-	-	-

- **Acute Toxicity Estimate of mixture (ATE_{mix})**

MIXTURE	ATE_{mix}		
	Oral [mg/kg]	Skin [mg/kg]	Inhalation [mg/l]
AUSTROGEL P	15,6	15,6	1,56

- **Skin corrosion/ irritation**

Mixture is not corrosive for skin and does not cause skin irritation.

- **Serious eye damage/ irritation**

The mixture causes eye irritation due to high content of ammonium nitrate.

- **Respiratory or skin sensitisation**

Not applicable.

- **Germ cell mutagenicity**

Not applicable.

- **Carcinogenicity**

Not applicable.

- **Reproductive toxicity**

Not applicable.

- **Summary of CMR properties**

Not applicable.

- **STOT (Specific target organ toxicity) — single exposure**

Not applicable.

- **STOT (Specific target organ toxicity) — repeated exposure**

Nitroglycerin and ethylene glycol dinitrate are toxic for cardiovascular system due to repeated exposure by inhalation and by skin.

- **Aspiration hazard**

Not applicable.

- **Symptoms related to the physical, chemical and toxicological characteristics**

SYMPTOMS	
ACUTE	DELAYED
Skin reddening (especially on face), sensation of feeling hot, headache, hallucination, nausea, burning in throat, tinnitus, shortness of breath; pain in the chest may occur as well as stomachache; sudden blood pressure drop, which may lead to collapse, convulsions, breathing problems and death.	Repeated or chronic exposure to vapors may increase tolerance (short term effect) to nitroesters and may lead to increased methemoglobin level and changes in nervous system and blood vessels. Tremors, neurological pain, digestive disorders, chronic skin inflammations and allergic reactions. Repeated exposure may cause symptoms similar to acute symptoms.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The mixture and its components are not identified as as having endocrine disrupting properties.

11.2.2 Other information

Nitroglycerin and ethylene glycol dinitrate hale synergistically effect with antihypertensive drugs, vasodilators, TPDL, neuroleptics, alcohol, sildenafil, tadalafil and vardenafil.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No data on toxicity to aquatic life.

12.2 Persistence and degradability

Not specified.

12.3 Bioaccumulative potential

Product does not contain substances accumulating in living organisms.

12.4 Mobility in soil

Not specified.

12.5 Results of PBT and vPvB assessment

The mixture and its components are not classified as PBT and vPvB.

12.6 Endocrine disrupting properties

The mixture and its components are not identified as having endocrine disrupting properties.

12.7 Other adverse effects

None.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

- **Disposal of the product/ packaging**

Product disposal	Product damaged, expired or does not met the quality requirements made harmless by an authorized subject only. Waste code: given by the manufacturer of waste.
Packaging disposal	The packaging should be disposed by combustion in open air or in special devices and installations adapted for this purpose or in accordance with local regulations. The packaging can be disposed by authorized subject only. Waste code: given by the manufacturer of waste.

- **Waste processing – essentials information**

The waste should not be processed for safety reasons. The waste should be disposed.

- **Wastewater discharge – essentials information**

Do not discharge the waste to sewage system.

- **Other information about wastes disposal**

Special safety measures	See SECTION 7.
Legal basis	Depends on the local legislation.

Disposal of the waste may be carried out by authorized personnel only. Disposal of the product should comply to requirements of environmental safety, legislation on waste disposal and requirements of local authorities.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

UN 0081

14.2 UN proper shipping name

Polish	MATERIAŁ WYBUCHOWY KRUSZĄCY TYPU A
English	EXPLOSIVE, BLASTING, TYPE A
German	SPRENGSTOFF, TYP A
French	EXPLOSIF DE MINE DU TYPE A

14.3. Transport hazard class(es)

Class	1
Division	1.1 D

14.4. Packing group

Not applicable.

14.5 Environmental hazards

Mixture possesses chronic toxicity hazard to aquatic life, cat. 3 (Aquatic Chronic 3 H412). According to ADR regulation in such case marking with the environmentally hazardous substance mark is not needed.

14.6 Special precautions for user

Packaging method and package labeling as well as the labeling of the means of transport of explosives of class 1.1D, subject to regulations appropriate for specific mean of transport (ADR/ RID, IMDG, IATA/ ICAO).

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

EU Regulations	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, 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, as amended. 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) (Text with EEA relevance), as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance).
Authorizations	Certificate No. 1453.EXP.10.177 Classification Certificate No. 037/IPO-BW/2010 issued by Institute of Industrial Organic Chemistry in Warsaw.
Other international regulations	Directive 2014/28/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to the making available on the market and supervision of explosives for civil uses (recast) Text with EEA relevance. Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC Text with EEA relevance. European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) concluded in Geneva on 30 September 1957; O.J. 2009 No 27 pos. 162, as amended. DIRECTIVE 2008/68/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 September 2008 on the inland transport of dangerous goods (Text with EEA relevance), as amended.

Local regulations	Depends on the country/ local legislation.
Professional limitations	The product should be used by a trained and qualified personnel only.
	People who take sildenafil, tadalafil or vardenafil are forbid to work with product containing nitroesters.

15.2 Chemical safety assessment

Chemical safety assessment for mixture is not needed.

SECTION 16: OTHER INFORMATION

- **Changes from the previous version of the SDS**

  - Version 1.0. : General update of the SDS; Update of Section 15
  - Version 3.0: General update of safety data sheet;
  - Version 3.1: UFI assignation, amendments in SECTION 9.

- **Abbreviations and acronyms**

H-phrases

H200	Unstable explosives.
H201	Explosive; mass explosion hazard.
H272	May intensify fire; oxidiser.
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

P-phrases	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P250	Do not subject to grinding/shock/friction.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P372+P380+P373	In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.
P234	Keep only in original packaging.
Other	
UFI	Unique Formula identifier
TLV-TWA	Threshold limit value - Time weighted average
TLV-STEL	Threshold limit value - Short-term exposure limit
TLV-C	Threshold limit value - Ceiling limit.
BLV	Biological Limit Value.
DNEL	Derived no-effect level.
PNEC	Predicted No Effect Concentration.
LD_{50}	Median lethal dose.
EC_{50}	Half maximal effective concentration.
EC number	EINECS numer.
CAS	Unique numerical identifier assigned by Chemical Abstracts Service to every chemical substance.
CMR	Carcinogenic, Mutagenic or Toxic for Reproduction.
Expl. 1.1.	Explosive, subclass 1.1
Unst. Expl	Unstable explosive.
Acute Tox. 2	Acute Toxicity, cat. 2
Acute Tox. 1	Acute Toxicity, cat. 1

Acute Tox. 4	Acute Toxicity, cat. 4
Eye Irrit. 2	Eye Irritating, cat. 2
STOT RE 2	Specific Target Organ Toxicity - Repeated Exposure, cat. 2
Aquatic Chronic 2	Chronic toxicity to aquatic life, cat. 2
Aquatic Chronic 3	Chronic toxicity to aquatic life, cat. 3
Ox. Sol 3	Oxidising solid, cat. 3
PBT	Persistent, bioaccumulative and toxic
vPvB	Very persistent and very bioaccumulative

- **Literature and data sources**

  - SDS of raw materials, practical knowledge and experience. All the provided data is related to the product in the form in which it is used.
  - GESTIS and ECOTOX, CIOP databases;

- **The procedure used for the mixture classification in accordance with Regulation (EC) No. 1272/2008**

Expl. 1.1 H201	Weight of evidence.
Eye. Irrit. 2 H319	Computational method.
Acute Tox. 2 H300	Computational method.
Acute Tox. 1 H310	Computational method.
Acute Tox. 2 H330	Computational method.
STOT RE 2 H373	Computational method.
Aquatic Chronic 3 H412	Computational method.

- **Training**

Personnel involved in handling the mixture should be trained in handling, safety and work hygiene while working with the product.

- **Closing remarks**

The maximum permissible concentrations of the listed components of the mixture depend on national regulations. All information and data included in this Safety Data Sheet were prepared on the basis of the above mentioned documents, reference documentation, our knowledge and experience. Information and data included should be interpreted as safety issues description and must not be interpreted as parameters guaranteed by the manufacturer. The User is solely responsible for ensuring safe storage and safe conditions while using the product. This Safety Data Sheet only refers to intended and recommended uses of the product. The User is solely liable for the result of any improper handling and/or use of the product.