1. SECTION - Identification of the substance / mixture and of the company / undertaking.

1.1. Product identifier:

Product name:	32.5% urea aqueous solution - **AdBlue®**
Product manufacturer and distributor:	CrossChem Ísland ehf.
REACH No.:	Not applicable for mixtures.
CAS No.:	Not applicable for mixtures.
EC No.:	Not applicable for mixtures.
Index No.:	Not applicable for mixtures.
UFI:	Not applicable for non dangerous mixtures.
Molecular formula:	Not applicable for mixtures.
Molecular weight:	Not applicable for mixtures.

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

Relevant identified uses: **SU1** – Agriculture, forestry, and fishery;
SU22 – Professional uses;
SU23 – Cleaning of exhaust gases
PC3 – Air care products;
PROC5 – Mixing or blending in batch processes;
PROC8a – Transfer of substance or mixture (charging and discharging) at non- dedicated facilities;
PROC8b – Transfer of substance or mixture (charging and discharging) at dedicated facilities;
PROC11 – Non industrial spraying;
ERC9a – Widespread use of functional fluid (indoor);
ERC9b – Widespread use of functional fluid (outdoor);
ERC10a – Widespread use of articles with low release (outdoor);
ERC11a – Widespread use of articles with low release (indoor);
Descriptor codes are indicative only and depend on the consumer's end use.
Uses advised against: All other types except the identified uses listed. Do not use for private purposes. Do not use on products that come into close contact with food products.
Reason why uses advised against: Not applicable.

1.3. Details of the Supplier of the safety data sheet:

Manufacturer / Supplier:	CrossChem Ísland ehf.
Street address / P.O. Box: (Office, factory, warehouse)	Borgahella 31, Hafnarfjörður, Höfuðborgarsvæðið, 221, Iceland
National Registration No.:	690724-2190
Telephone number:	+581 1515 (Administration)
E-mail:	crosschem@crosschem.is
Homepage:	crosschem.is
E-mail address of competent person, responsible for the SDS:	Valdimar@crosschem.is

1.4. Emergency telephone number:

State Fire and Rescue Service: **(+354) 112**
Working hours: 24 hours a day, 365 days a year.

"Eitrunarmiðstöð", Poisoning and Drug Information Center: **(+354) 543 2222**
Working hours: 24 hours a day, 365 days a year.

Address: Áland 6, 108 Reykjavík, Iceland
Other Notes: Help is provided in Icelandic and English languages.
Poison Control Centers in Europe can be found on this site https://poisoncentres.echa.europa.eu/appointed-bodies

2. SECTION - Hazards identification.

2.1. Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP): This mixture is not classified as dangerous under Regulation No.1272/2008.

2.2. Label elements:

Labelling according to Regulation (EC) No. 1272/2008 (CLP): The product does not need to be labeled in accordance with CLP and relevant national laws.
Hazard pictograms: Not required.
Signal word: Not required.
Hazard statements: Not required.
Precautionary statements:
Prevention: **P102** – Keep out of reach of children**;**
P280 – Wear protective gloves/protective clothing/eye protection/face protection;
Reaction: **P301+P312** – IF SWALLOWED: call a POISON CENTER or doctor / physician IF you feel unwell;
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing;
P302+P352 – IF ON SKIN: Wash with plenty of water and soap;
Storage: **P401** – Store away from food, drink and animal food;
Liquidation: **P501** – Dispose of contents/container in accordance to local and international regulations.
Supplemental Hazard information (EU): If product contacts eyes, it may cause eye irritation. If product contacts skin, it may cause skin irritation.

2.3. Other hazards: The product is considered to contain, at 0.1% or more, substances that meet the criteria to be classified as persistent, bioaccumulative and toxic (PBT) or as very persistent and very bioaccumulative (vPvB) in accordance with Regulation (EU) no. 1907/2006 Annex XIII.
The product does not contain substances, in concentration ≥0.1% (w/w), which are known or may have endocrine disrupting properties according to Regulation (EU) 2017/2100 and Regulation (EU) 2018/605.

3. SECTION - Composition/ information on ingredients.

3.1. Substances: Not applicable.

3.2. Mixtures:

Name of the substance	CAS No.; EC No.; REACH No.	Specific Concentration limits, M-Factors, Acute Toxicity Estimates (ATE)	Classification according to (EC) No. 1272/2008.	W%/W
Urea	57-13-6; 200-315-5; 01-2119463277-33-0271	-	-	32.5%

4. SECTION - First aid measures.



4.1. Description of first aid measures:

General information: Remove clothing immediately. Get medical help immediately if the person is unwell. Keep the victim calm. If the person is unconscious, place them in a stable lateral position. Consult your doctor. Show this safety data sheet to your doctor. In case of doubt or symptoms, consult a medical professional. In case of accident or illness, seek medical attention immediately (show instructions for use or safety data sheet if possible). Do not leave the victim unattended. Remove the victim from the danger zone. Keep the victim warm and calm and cover him.

Following inhalation: There is a risk of inhalation exposure if an aerosol is generated. If inhaled, to protect yourself, move the person to fresh air, away from the scene. If breathing is difficult, irregular, or if breathing stops, provide artificial respiration or give breathing oxygen by trained personnel. If not breathing, give artificial respiration. In all cases when there are doubts about a person's life, or if symptoms persist, call for emergency medical help.

Following skin contact: Wash the affected part of the body with soap and plenty of water for at least 15 minutes. If inflammation or skin dryness persists, consult a doctor. Remove clothing and shoes. Wash the garment before reuse.

Following eye contact: Immediately flush eyes with running water. Continue to flush the eyes for at least 15 minutes, occasionally lifting the upper and lower eyelids to ensure thorough flushing of the eye. After rinsing with water, rinse the eyes again with physiological (0.9% NaCl) solution. Remove contact lenses if possible. If the irritation, redness or blinking of the eyes does not go away, consult an eye doctor.

Following ingestion: If the product is swallowed, rinse the mouth with plenty of water. Do not induce vomiting. Maintain a normal body temperature and try to avoid shock as much as possible. If the person is conscious, give the victim a glass of water to drink. During spontaneous vomiting, keep the victim's head low and body in a prone position to avoid choking. If the person is unconscious, do not give water. Seek medical attention. Do not administer any substance orally if the person is unconscious or having a seizure. If unconscious, place in a comfortable position and call for medical help immediately.

Self-protection of the first aider: Pay special attention to personal protection. Observe general personal hygiene requirements. Avoid inhalation of product mist and vapors. Product contact with the eyes and skin is prohibited. Avoid repeated or prolonged contact with skin or clothing. Use suitable protective clothing and rubber gloves. Do not perform any action that may cause any personal risk or without proper training. Protect yourself by providing help! If necessary, use personal protective equipment appropriate to the situation.

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

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or section 11. Laboured breathing, cough, chest pain. Prolonged inhalation causes chronic inflammation of the respiratory organs. By introducing substance orally, large amounts cause gastrointestinal dysfunction and abdominal pain. Irritating to eyes (burning sensation); red eyes; dry skin; itchy skin; red skin.

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

Notes to doctor: Recommend symptomatic treatment. Wash affected areas of the body with plenty of water. Facilities must be available at the workplace to provide immediate first aid. First aiders should use disposable medical gloves. If the victim is unconscious, make sure the airway is clear and place him in the lateral position. Symptomatic treatment. Monitoring of vital functions. Measures against circulatory shock and convulsions may be necessary. Give the doctor information about the substance / product already used and the first aid measures taken. First aid, decontamination, treatment of symptoms. To receive specific recommendations, the doctor should contact the Poisoning and Drug Information Center, tel.: (+354) 543 2222 (24 hours). Symptoms may be delayed and may not appear until several hours or days later. Recommend symptomatic treatment.

5. SECTION - Firefighting measures.



5.1. Extinguishing media:

Suitable extinguishing media: Adapt firefighting measures to the environment. Water spray, water mist, chemical foam, alcohol resistant foam, dry fire extinguishing powder, carbon dioxide (CO2).

Unsuitable extinguishing media: Full water jet.

5.2. Special hazards arising from the substance or mixture:

Hazardous combustion products: Not combustible but may decompose at high temperatures above 130°C. Urea decomposes to Biuret, Ammonia (NH3), Nitrogen Oxides (NOx), Carbon Monoxide (CO) and Carbon dioxide (CO2). In the case of lack of Oxygen, Hydrogen Cyanide (HCN) is formed. Product is not explosive. Short-term exposures to smoke and gases may lead to irreversible lung injury without early signs of symptoms.

5.3. Advice for firefighters:

Special protective equipment for fire-fighters: Do not enter the fire area without appropriate protective equipment.

Self-contained breathing apparatus (SCBA) must be worn if the potential chemical hazard is unknown or if you will be in confined spaces. Irritant and poisonous gases may be released during combustion, so positive pressure self-contained breathing apparatus with full face mask should be used, and protective firefighting clothing should be used (includes firefighting helmet, coat, trousers, boots, gloves, eye and face protection).

Firefighter clothing conforming to European standard EN469 provides a basic level of protection against chemical accidents and includes helmets, safety shoes and gloves. Clothing that does not meet the requirements of EN469 is not suitable for chemical accidents. Use positive pressure self-contained breathing apparatus with chemical protective clothing if personal (close) contact with the product is possible. Use a positive pressure self-contained breathing apparatus with a gas-tight suit if you are likely to be very close to the substance or in the vicinity of its combustion gases.

5.4. Additional information:

Stay downwind during firefighting. Do not inhale fumes and smoke.

If a fire has occurred, the scene must be cordoned off immediately, expelling all unauthorized persons. Containers exposed to heat will build up pressure and decomposition of the product may cause the container to rupture or explode. Remove undamaged containers from the immediate danger area if it can be done safely. Cool the tanks with a cold water jet. If there is no risk, move the containers away from the heat source. Eliminate possible sources of ignition. Stop the leak if it can be done with minimal risk. Water mist can be useful for reducing or dispersing vapors. Collect used extinguishing water separately if possible. It must not be allowed for product to enter the drains. Rapid decomposition is possible in the event of a large-scale fire

6. SECTION - Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Use of appropriate personal protective equipment, see Section 8. Consult an emergency expert. Reduce potential sources of ignition and heat, do not smoke. Provide adequate ventilation if possible. Evacuate surrounding personnel to a safe place, do not allow unprotected personnel to enter the accident area. Get people to safety. Do not touch or walk on spilled or spilled product.

For emergency responders: Use of appropriate personal protective equipment, see Section 8, to prevent contact of substance or mixture with skin, eyes, lungs or clothing. Elimination of sources of ignition, provision of sufficient ventilation if possible. Isolate and evacuate the dangerous area, reduce the presence of persons not participating in the rescue operation. Get people to safety. Stop the leak if possible. Do not touch or walk on spilled or spilled product. Wipe up the spilled area and flush the area with plenty of water. Collect the used rinse water.

6.2. Environmental precautions: Do not allow the product to reach the environment: sewers, drains, surface water, groundwater or on the ground (soil/subsoil). Cover drains or use absorbent pads. Ensure that the product or its

residues are collected and prevented from spreading. Ensure separate collection and treatment of all wastewater in wastewater treatment plants. Accumulate the contaminated washing water and dispose of it. In the event that the product has entered water supplies or caused environmental pollution (pollution of sewage systems, water bodies, soil or air), immediately notify local authorities to stop water supply and use. If product spills cannot be contained, report it to local authorities immediately. In case of gas/dust/vapour/mist formation: limit by spraying with water or water mist.

6.3. Methods and material for containment and cleaning up:

For containment: Provide adequate ventilation if possible. Ventilate the contaminated area and avoid inhalation of fumes and dust. Block or cover drains or storm water drains. In the event of a large spill, stop the flow of material using absorbent pads or cushions or sand or earth if it is safe to do so and without risk. Collect as much of the spilled product as possible mechanically (with shovels or using a vacuum pump) and place it in safe and suitable containers. Avoid dust generation during mechanical collection. Absorb excess in universal absorbent, dry sand, silica gel, or any non-combustible absorbent material if possible (do not use sawdust as absorbent material). Then place the used material in closed, secure and properly labeled containers for disposal. Thoroughly clean contaminated objects and places, observing environmental protection regulations. Flush the area with plenty of water. Never return spilled product to original container for reuse. Reduce generation of toxic gases/vapours with water mist. In case of soil contamination, remove contaminated topsoil for remediation or disposal in accordance with local regulations. In case of product dust leakage - use water spray or fog to limit the spread of dust.
For cleaning up: The affected area should be rinsed and washed if necessary. After containing the substance, flush the area with plenty of water. Clean up the residue with a broom. Dispose of collected product in safe containers in accordance with Section 13. In case of small spills, wipe the surface with a non-flammable absorbent material. Then clean the surface with water.
In case of small spills: Dilute residues with water. In case of small spills, wipe the surface with a non-flammable absorbent material. Then clean the surface with water. Sweep up. Dispose of according to local regulations.
In case of large spills: Remove spills using a vacuum tank. Dilute residues with water. Sweep or collect the remaining material. Dispose of in accordance with local and national regulations.
Other information: Wear protective clothing, including goggles, nitrile when cleaning up spills or butyl rubber gloves, a rubber apron or clothing made of nitrile or butyl rubber, and a gas mask (full face mask) with ABEK type filters.

6.4. Reference to other sections:

See section 7 for safe handling;
See section 8 for personal protective equipment;
See section 13 for waste disposal and disposal.

7. SECTION - Handling and storage.

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided.

7.1. Safe handling, use and necessary precautions:

Protective measures: Use the product only in dry, well-ventilated areas and away from direct sunlight. Carefully move an open container or bag, close the container carefully after using the product. Handle the product in accordance with good industrial hygiene and safety regulations. Avoid repeated or prolonged contact with skin and eyes. Avoid inhalation of product vapor or mist. Avoid spillage in confined spaces. Use appropriate personal protective equipment: protective clothing, gloves, goggles and respirator if necessary (see section 8). Eating, smoking and drinking are prohibited in work areas. Wash hands after use. Remove contaminated clothing and equipment before eating. Provide water around work areas for washing and cleaning. Store in original container or approved alternative made of compatible material, keep tightly closed when not in use. Empty containers or bags retain product residue and can be hazardous. Do not keep product-soaked cleaning cloths in your trouser pockets. Do not inhale mist, vapour or aerosol. Organize the workplace and work methods in such a way that direct contact

with the product is prevented or minimized. Caution – product vapors are heavier than air and can travel long distances at floor level.

Measures to prevent fire: This substance is not flammable, special fire protection measures are not required. Follow preventative fire protection regulations. Do not allow any pump to run dry or over-heat e.g. due to blockage or closed valve in the lines, it may result in pumping against a dead-end. Under such conditions if over-heating occurs this may cause vaporization and possible decomposition of the product. This can create pressure build-up in the pump and, if unchecked, could lead to an explosion. Ensure that the pump is used correctly according to the manufacturers instructions at all times when pumping the product. Take precautionary measures against static discharges. Earth all parts which can be electrically charged. Transfer at a slow speed to avoid the creation of electrostatic charges. Use only in well ventilated areas. Work clothing that becomes wet should be removed.

Measures to prevent aerosol and dust generation: Avoid the formation of splashes, spraying, drops and mists in enclosed spaces. Do not transport by using compressed air.

Measures to protect the environment: When using the product, if a large concentration of product mist or vapor will form in closed rooms, the appropriate air ventilation systems must be sufficiently powerful and equipped with filters. Check the emission limit values, if the values are exceeded, it is necessary to clean the exhaust air. If it is not possible to reduce the concentration of the product in the air in the room, use personal protective equipment.

Advice on general occupational hygiene: Provide adequate exhaust ventilation in areas where aerosols or mists are generated. Avoid contact with eyes and skin. Provide easy access to water and eyewash and indicate its location. Wash your hands with soap and water after use, before breaks and at the end of the work day. When using the product, do not eat, drink or smoke in areas where the product is handled and stored. "No smoking" signs must be placed in the work area. Regular cleaning of equipment, work area and clothing is recommended. If necessary, use protective equipment when cleaning. Do not store the product together with food, drink and animal feed. Work clothing that becomes saturated in contact with the product must be removed immediately. Wash hands before breaks and after work. Work in well-ventilated areas or use appropriate respiratory protection. Private clothing should be stored separately from work clothing. Wash contaminated clothing before reuse. Remove contaminated and saturated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities:

Technical measures and storage conditions: Do not store near heat, sparks and fire sources. Store at reduced or ambient temperature (from -11°C to +30°C). Avoid freezing and high temperatures. Store away from direct sunlight. Store away from moisture (the product is hygroscopic) and heat to preserve the technical properties of the product. Do not allow the product to freeze. Protect containers or tanks from physical damage. Containers or tanks must be clearly marked. Store the product in a tightly closed, original manufacturer's packaging, in an upright position. General ventilation in the workplace must be sufficient to control the amount of dust or mist of the product in the air. If the amount of product in the air exceeds the permissible exposure limits, use ventilation or other engineering controls or personal protective equipment to reduce exposure to workers and keep vapor or dust concentration levels below the permissible exposure limit. Ground containers or filling devices to reduce the risk of static discharge and sparking. Floors must not have a floor drain. Store in accordance with local regulations. A floor drain may be provided if the outlet of the drain enters a specially created treatment system. Keep tank or container tightly closed in a dry, cool and well-ventilated area. To prevent leakage, store the container in an upright position. Do not store in unlabeled containers or containers. Ensure that containers with the product are not accessible to unauthorized persons. Store away from strong acids and strong oxidizers. Use only clean equipment. Ensure that containers with the product are not accessible to unauthorized persons.

Packaging materials: Suitable packing material: Containers manufactured of high alloyed austenitic Cr-Ni, Cr-Ni-Mo steels; titanium; Ni-Mo-Cr-Mn-Cu-Si-Fe alloys, polyethylene, polypropylene, polyisobutylene, polyfluoroethylene (PFE), perfluoroalkoxy alkane (PFA), polytetrafluoroethylene (PTFE), copolymers (vinylidene fluorides(PVDF) and hexafluoropropylenes – viton - (HFP)).

Non suitable packaging materials: Copper and its alloys; galvanised steel containers; carbon (non alloyed or low-alloy) steels; aluminum and its alloys; magnesium and its alloys; paper; glass.

The product can be filled in the packaging chosen by the buyer, if it ensures safe transportation and storage of the product. Check it or get the manufacturers recommendations for material compatibility before use.

Requirements for storage rooms and vessels: Store in closed form. Use isolated drainage to prevent leakage into the environment. Provide adequate ventilation in the storage area. Store the product away from direct sunlight, in a dry and well-ventilated place. Floors must be leak-proof or covered with insulating material. It is recommended to use a collection container under IBC tanks or drums when the product is poured. For more information on storage requirements, contact your local authorities. If the container has been opened, after using the product, it should be carefully secured and kept in an upright position to prevent leakage. Keep containers and bags tightly closed. Packages and containers should be checked regularly by visual observation for any signs of damage, e.g. corrosion. Store containers in such a way that they are protected from physical damage. Check regularly for leaks. It is preferable to store in the original packaging. Do not remove any type of labeling from containers or bags (even if they are empty). Do not store the product in containers that are not labeled. Store in the original container as much as possible. Containers can be dangerous when empty. Because empty containers or bags may contain product residue, follow all SDS and label warnings even after emptying the container or bag. Take precautions against static electricity discharge.

Storage class: Not applicable.

Further information on storage conditions: Product has a shelf life of 1 year (12 months), if in unopened manufacturers packing, if stored in a cool and dry location and away from direct sunlight. Store out of the reach of children. Storage with the following substances is prohibited: Pharmaceuticals, foods, animal feeds, infectious and radioactive substances, explosive substances, gases, strong oxidizing substances of storage class 5.1A. Only products and substances of the same storage class can be stored together. The product should not be stored with substances with which hazardous chemical reactions are possible.

7.3. Specific end use(s): Product is NO_x reducing agent. Product is used to inject in exhaust systems of diesel engines before a selective catalytic converter. Moreover as anti coniferous diseases (root sponges) spread. The type of use is indicative as it depends on the end use of the consumer. Only intended for 1.2. section mentioned specific uses.

8. SECTION - Exposure controls/personal protection.

8.1. Control parameters:

Components with workplace control parameters:

Component	CAS No.	Control parameter, Value		Base
		OEL 8h.	Short term, 15 min.	
Urea	57-13-6	10 mg/m³	-	Occupational health and safety requirements for exposure to chemicals at work spaces

DNEL values of exposure to human health: The product is a mixture of several substances. The DNEL values of the product have not been determined and indicated according to the DNEL values of the pure substances in the product for the physicochemical properties of the product that could have the greatest negative impact, according to the REACH documentation. **BWD** – body weight per day;

Mode of exposure	Type of exposure	DNEL value (workers)	DNEL value (public consumers)	The most negative physicochemical effect
Inhalation	Acute effect, systemic	(iii)	(iii)	Not applicable.
Inhalation	Acute effect, local	(iii)	(iii)	Not applicable.
Inhalation	Chronic effect, systemic	292 mg/m³	125 mg/m³	Toxicity.
Inhalation	Chronic effect, local	292 mg/m³	125 mg/m³	Toxicity.
Dermal	Acute effect systemic	(iii)	(iii)	Not applicable.
Dermal	Acute effect, local	(iii)	(iii)	Not applicable.
Dermal	Chronic effect, systemic	580 mg/kg, BWD	580 mg/kg, BWD	Repeated dose toxicity.
Dermal	Chronic effect, local	580 mg/kg, BWD	580 mg/kg, BWD	Toxicity.
Through eyes	Acute effect, local	(iii)	(iii)	Not applicable.
Oral	Acute effect, systemic	(ii)	(iii)	Not applicable.
Oral	Acute effect, local	(ii)	(iii)	Not applicable.
Oral	Chronic effect, systemic	(ii)	42 mg/kg, BWD	Repeated dose toxicity.
Oral	Chronic effect, local	(ii)	42 mg/kg, BWD	Toxicity.
i) hazard identified but no DNEL available; ii) no exposure expected, iii) no hazard identified				

Predicted no effect concentration values: PNEC of the product is not determined. PNEC of pure substance contained in the product, according to REACH dossier is provided.

Environmental protection target	PNEC value
Fresh water	**Urea:** 0.47mg/L; Periodic exposure – PNEC value not available.
Freshwater sediments	**Urea:** (ii)
Marine water	**Urea:** 0.47 mg/L; Periodic exposure – PNEC value not available.
Marine sediments	**Urea:** (ii)
Food chain	**Urea:** (iii)
Microorganisms in sewage treatment	**Urea:** The hazard is not known.
Soil (agricultural)	**Urea:** No hazard to soil.
Air	(ii)
i) hazard identified but no PNEC available; ii) no exposure expected; iii) no hazard identified.	

8.2. Exposure controls:

Appropriate engineering controls: Provide good general ventilation to control exposure of workers to airborne contamination (vapor or aerosol), especially in confined spaces. The general rules of industrial hygiene for working with the product must be followed. Provide access to water, hand washing facilities and showers, and provide easy

access to eye wash facilities. Do not use tools that can generate sparks and flames. Avoid static build-up, use tools and containers that are grounded. Do not expose product containers to mechanical damage. It is recommended that emissions from ventilation systems and work process equipment be tested to ensure that they meet the requirements of environmental legislation. Filters or technological modifications to process equipment may be required to reduce emissions to acceptable levels.

Personal protection equipment:

Eye and face protection: Use accessories for eye and face protection that have been tested and approved according to the appropriate national standards, such as: NIOSH (USA) or EN 166 (EU). It is recommended to use polycarbonate goggles, tight-fitting goggles or a face shield to protect the eyes from dust or aerosols.

Body protection: Choose the type of body protection according to the situation, the concentration and amount of hazardous substances, and the specific concentration in the workplace. Work clothes must comply with the EN ISO 13688 standard and special work shoes must comply with the EN ISO 20347:2012 standard. Wear an apron or lab coat or a chemical resistant coverall. It is recommended to use liquid and dustproof, fireproof or antistatic clothing. The type of protective equipment must be chosen depending on the concentration and amount of the product in the specific workplace, as well as depending on the type of use.

Respiratory protection: Use particle respirators, half-face or full-face respirators with type P1-P2 (EN 14387) or respirator cartridge dust particles and with multi-purpose combination (US) or type ABEK (EN 14387) or just A-P2 – brown white (LVS EN 141, LVS EN 136) respirator cartridges as a backup to engineering controls, if the risk assessment requires it. If a respirator is the only means of protection, use a full facepiece respirator with self-contained air supply. Use respirators and accessories that have been tested and approved according to the appropriate national standards, NIOSH (US) or CEN (EU).

Skin protection: Skin protection creams do not protect against the product as effectively as protective gloves. Also consider the specific conditions under which the product is used, such as cuts, wear and contact time. Gloves should be tested before use. Use proper glove removal technique (without touching the inside of the glove) to avoid skin contact. Gloves should be removed and replaced immediately if there are any signs of glove degradation or chemical exposure. Rinse and remove gloves immediately after use. Dispose of contaminated gloves after use in accordance with applicable law and good laboratory practice. Gloves must be chemically resistant according to EN 420 or EN ISO 374-1 standards. Protective gloves must be made of material that meets the specification (in the table):

Glove material	Minimum glove thickness (mm)	Penetration time (min)
Buthyl rubber	0.50	>480
Nitrile rubber/ Nitrile latex	0.40	>480
Fluorocarbon rubber	0.40	>480
Polychloroprene	0.50	>480
Natural rubber/Natural latex	0.50	>240
Polyvinyl chloride	0.50	>240
Neoprene	0.50	>480

* It should be noted that the breakthrough time of the glove material in this section is described at 22°C and using pure urea. When working at higher temperatures, the resistance of the glove material can be significantly lower, and in such cases the allowable use time of the gloves must be shortened. An increase/decrease in layer thickness by 1.5 times doubles/reduces the penetration time of the substance. We recommend that when starting to use gloves of a new type or a different manufacturer, make sure that they are chemically and mechanically resistant to the working conditions. If you have any questions about glove applicability, please contact the manufacturer or supplier. These data refer only to the pure substance. When transferring the substance to mixtures, these figures should be considered as guidelines only.

Thermal hazards: No data available.

Environmental exposure controls: Emissions from ventilation or work process equipment should be monitored to

ensure this compliance with environmental protection legislation. In some cases, fume scrubbers, filters or technological modifications to process equipment will be required to reduce emissions to acceptable levels. Do not allow the product to enter the soil, water bodies or sewage system. Check that the product packaging is sealed during storage, handling and transportation. Absorbent materials to contain spills should be readily available in storage areas. Carry out regular monitoring of air emissions.
Note: When the concentration of the substance is determined and known, the choice of personal protective equipment should be made taking into account the concentration of the substance in the specific workplace, the exposure time and the actions performed by the employee. In an emergency situation, if the concentration of a specific substance in the workplace is unknown, use protective equipment with the highest recommended protection class.
It is the employer's responsibility to ensure that the personal protective equipment used, as well as work clothes and shoes, have protective and functional properties, and to ensure that they are properly washed, maintained, repaired and disinfected. The recommended initial and periodic inspections of employees must be carried out in accordance with the procedures established in the country.

Impact on consumer control: No data available.
Hygiene measures: Act in accordance with good industrial hygiene and safety practices. Do not eat, do not drink and do not smoke while using the product. Remove contaminated clothing and wash before reuse. Store work clothes and shoes separately from everyday clothes. Before work breaks and after finishing work, wash exposed skin areas with soap and water, it is recommended to apply skin protection cream. Remove contaminated clothing and protective equipment before entering dining areas. After the end of the work shift, a shower is recommended.

8.3. Environmental exposure controls:
Do not allow the product to enter drains, surface water or ground water. Environmental hazard control measures are detailed in section 6.
Avoid getting the product into the environment. Contain spread of spill or spill by using inert absorbent material (sand, gravel). Cover pipes and drains.

9. SECTION - Physical and chemical properties.
9.1 Information on basic physical and chemical properties:

Appearance:	Transparent liquid at 20°C and a pressure of 1013 hPa.
Odour:	Light ammonia smell.
Odour threshold:	Not measured.
pH:	8.5-9.5 at 20°C temp.
Melting/freezing point:	-11 to -11.5°C
Initial boiling point and boiling range:	Decomposes at about 100°C.
Flash point:	Non flammable.
Evaporation rate:	Not measured.
Flammability:	Non flammable upon ignition.
Upper/lower flammability or explosive limits:	Non flammable.
Vapour pressure:	22 - 23 mbar (20°C).
Vapour density:	Not measured.
Relative density:	1.087 – 1.094 kg/L (20°C).
Solubility:	No data available.
Partition coefficient: n-octanol/water:	No data available.
Auto-ignition temperature:	Not measured.

Decomposition temperature: >132°C.
Viscosity: Not measured.
Explosive properties: Based to column 2 of Annex VII to the REACH Regulation, does not apply, product is not explosive. There are no chemical functional groups associated with explosive properties.
Oxidizing properties: Based on column 2 of Annex VII to the REACH Regulation, does not apply, product is not oxidizing. There are no chemical functional groups associated with oxidizing properties.

9.2. Other safety information: Not applicable.
Information on physical hazard classes: Not available.
Other safety features: Not available.

10. SECTION - Stability and reactivity.

10.1. Reactivity: Stable under normal conditions of transport and use (see section 7 "Use and storage").
10.2. Chemical stability: Stable during storage, transport and use at reduced and normal ambient temperatures (-11°C to +30°C) (see chapter 7 "Use and storage").
10.3. Possibility of hazardous reactions: When used and stored according to the regulations, no dangerous reactions occur. Strongly reacts with: Strong bases, Nitric acid, strong oxidizers.
10.4. Conditions to avoid: Ambient temperatures below the crystallization temperature (-11°C) and above 30°C (hydrolysis occurs) must be avoided. Any impurity will contaminate the product and it cannot be used for its intended purpose. Avoid direct sunlight, heat, flames, sparks and incompatible materials. Avoid product freezing and physical damage to containers.
10.5. Incompatible materials: Alkali metals; strong alkali solutions; reducing agents; organic peroxides; oxidizers such as: chlorine, nitric acid, permanganates, ammonium nitrate, halogens or chromate solutions. Do not store together with explosive substances (storage class 4.1A); for flammable solids or desensitized substances (storage class 4.1B); substances that release flammable gases in contact with water; for strongly oxidizing substances (storage class 5.1A); for non-flammable acutely toxic substances (storage class 6.1B).
10.6. Hazardous decomposition products: When used and stored according to the regulations, no dangerous reactions occur. In case of fire, dangerous decomposition products may occur: Ammonia (NH_3), Carbon monoxide (CO), Carbon dioxide (CO_2), Nitrogen oxides (NOx). See. 5.2. section.

11. SECTION - Toxicological information.

11.1. Information on toxicological effects: The product is a mixture. Toxicity information, according to the REACH documentation, is given for pure substances that are part of the product.
Acute toxicity:
Effects on humans: No data available.
Effects on animals:

Routes of exposure	Exposure dose, concentration	Species	Method	Symptoms, effects	Remark
Acute oral toxicity	**(Urea):** LD50: 14300 - 15 000 mg/kg bw	Rat	OECD 423	No adverse effect observed.	ECHA
Acute dermal toxicity	**(Urea):** LD50: 8200 - 9400 mg/kg	Rat	OECD 402	No adverse effect observed.	ECHA
Acute intravenous toxicity	**(Urea):** LD50: 5300 - 5400 mg/kg	Rat	OECD 402	No adverse effect observed.	ECHA

Other information: See the ECHA page for detailed information.
Assessment / Classification: After all routes of exposure have been investigated and according to CLP, the product does not meet the criteria to be considered acutely toxic.

Skin corrosion/irritation:

Effects on humans: No data available.
Effects on animals: See the ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / classification: According to the studied types of exposure, in accordance with Regulation (EC) No. 1272/2008 (CLP) the product is not classified as skin corrosive or irritant.

Serious eye damage/irritation:

Effects on humans: No data available.
Effects on animals: See the ECHA page for detailed information.
Other information: After direct contact with the eyes, the product causes a burning sensation in the eyes. Splashes of the product may cause redness and superficial damage, which, however, disappear quickly. For detailed information on the substances contained in the product, see the ECHA page.
Assessment / Classification: According to the studied types of exposure, in accordance with Regulation (EC) No. 1272/2008 (CLP) the product is not classified as eye damaging.

Respiratory or skin sensitisation:

Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: The product is not considered a skin sensitizer, therefore it is not subject to labeling and classification requirements according to Regulation (EC) No. 1272/2008 (CLP).

Germ cell mutagenicity:

Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: Available test data do not indicate a genetic toxicity potential. The product is not considered to be genetically toxic, according to Regulation (EC) No. 1272/2008 (CLP).

Carcinogenicity:

Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: According to Regulation (EC) No. 1272/2008 this product cannot be classified as carcinogenic.

Reproductive toxicity:

Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: Based on available data, the product is not toxic to the reproductive system. As a result, the product is not classified as toxic for reproductive function according to Regulation (EC) No. 1272/2008 (CLP).

Mutagenicity of stem cells:
Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: Based on available data, the product is not mutagenic to stem cells. As a result, the product is not classified as a stem cell mutagen according to Regulation (EC) No. 1272/2008 (CLP).

Summary of evaluation of the CMR properties:
Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: Based on the available information, the product does not meet the criteria for it classified as a mutagen of class 1A or 1B (CLP) for the reproductive system, according to Regulation (EC) No. 1272/2008 (CLP).

STOT-single exposure:
Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: Based on available data, the product has no specific target organ toxicity. As a result, the product is not classified in the STOT class according to Regulation (EC) No. 1272/2008 (CLP).

STOT-repeated exposure:
Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: Repeat-dose toxicity was not observed in any of the studies. Based on the available data, the classification criteria are not met to classify the product as causing repeated dose toxicity, in accordance with Regulation (EC) No. 1272/2008 (CLP).

Aspiration hazard:
Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Assessment / Classification: Based on available data, classification criteria not met.

Endocrine disrupting properties:
Effects on humans: No data available.
Effects on animals: See ECHA page for detailed information.
Other information: See the ECHA page for detailed information.
Novērtējums / klasifikācija: Based on available data, classification criteria not met.

Symptoms/effects, both acute and delayed:
For detailed information on the substances in the composition, see the ECHA page.

Other hazard information: For detailed information on the substances in the composition, see the ECHA page.

Additional information: May enter the body through inhalation, skin contact, eyes and, less likely,

ingestion. Symptoms related to physical, chemical and toxicological properties: Inhalation: Adverse symptoms may manifest as: respiratory tract irritation, cough, shortness of breath, irritation of the nasal mucosa. Skin contact: Adverse symptoms may manifest as: irritation, redness, inflammation, rash, dry skin, severe burns. Eye contact: Adverse symptoms may include: irritation, watering, redness. Strong eye tissue irritation, visual disturbances, mechanical damage to the surface of the cornea and conjunctivitis. Reversible visual impairment. Ingestion: Adverse symptoms may manifest as: very severe burns of the mucous membrane of the upper respiratory tract, abdominal pain, nausea, vomiting, headache, pallor. risk of perforation of esophagus and stomach, risk of poisoning.

12.SECTION - Ecological information.

12.1. Toxicity: Studies on the ecological impact of the product are not available. Since the product contains several pure substances, the information on the ecological impact, according to the REACH documentation, is provided for the pure substances included in the product.

Acute (short-term) toxicity:

Target parameter	Value	Species	Method	Exposure time	Remark
LC50	> 6810 mg/L **(Urea)**	Fish - Leuciscus idus	OECD 203	92 h	IUCLID
EC50	> 10000 mg/L **(Urea)**	Water invertebrates - Daphnia magna	OECD 202	24 h	ECHA
LC50	14 241 mg/L **(Urea)**	Water invertebrates - Herisoma trivolvis	OECD 202	24 h	ECHA
EC50	47 mg/L **(Urea)**	Algae - Microcystis aeruginosa	OECD 201	192 h	ECHA
LC50	60000 mg/L **(Urea)**	Mosquitoes - Aedes aegypti	Nav piemērojams	4 h	ECHA

Chronic (long-term) toxicity:

Target parameter	Value	Species	Method	Exposure time	Remark
LC50	> 10000 mg/L **(Urea)**	Algae - Scenedesmus quadricauda	OECD 201	7 days	ECHA

12.2. Persistence and degradability:

Biodegradation: The main way of biodegradation of urea is its enzymatic mineralization. In the absence of microorganisms, urea hydrolyzes very slowly to ammonium carbamate, which further decomposes to form ammonia and carbon dioxide. Urea hydrolysis is catalyzed by elevated temperature, alkalinity, and the presence of the biological enzyme, urease, in soil and water. Urea is easily biodegradable: 4 mg/L 1h at 20°C / 68°F Zahn-Wellens-Test (OECD 302B) - 400 mg/L: 3h: 2%, 7d: 52%, 14d: 85%, 16d: 96% . Easily biodegradable (after 16 days).

Other information: For the results of biodegradation studies of substances in the product, see: ECHA, PUBCHEM.

12.3. Bio accumulative potential:

Partition coefficient

n-octanol /water (log Pow): <-2.11 (20 °C) Urea. Considered low (based on high water solubility). The main part of the product - urea - does not have bioaccumulative properties, it does not create toxic compounds with other substances in the air or water.

Bioconcentration factor (BCF):

Species	Exposure time	Method	Result value	Remark
Fish - Leuciscus idus melanotus (Urea)	72 h	OECD 305	BCF = 10	ECHA

Based on the distribution coefficient (log Kow) and the experimental bioconcentration factor (BCF), the main part of the product - urea is not considered a bioaccumulative substance. The bioaccumulation potential of the product is considered to be minimal. The substances contained in the product will move very quickly in the soil due to the low log Kow value and high solubility of the substances in water.

12.4. Mobility in soil:

Known or predetermined prevalence in environmental compartments: If the product is released into the environment, the product is likely to spread to water.

Surface tension: Not measured.

Adsorption / Desorption:

Spreading environment	Mode of transport	Method	Result value (pure substance)	Remark
Soil – water (Urea)	Adsorbption	OECD 106	*Koc*: 0.037-0.064	TOXNET

12.5. Results of PBT and vPvB assessment:

This mixture does not contain ingredients considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at 0.1% or greater. According to Regulation (EC) No. 1907/2006 Annex XIII, the product does not meet the PBT and vPvB criteria and is not a PBT or vPvB substance. PBT and vPvB assessment has not been carried out, as the product is not included in Regulation (EC) No. 1907/2006 in Annex XIII.

12.6. Endocrine disrupting properties:

The product does not contain substances known or likely to have endocrine disrupting properties according to Regulation (EU) 2017/2100 or Regulation (EU) 2018/605. The product does not have endocrine disrupting properties.

12.7. Other adverse effects: Long-term adverse effects on aquatic organisms.

12.8. Additional information: Large quantities of the product in water reservoirs may be harmful to fish and aquatic organisms.

13. SECTION - Disposal considerations.

13.1. Waste treatment methods:

Product / Packaging disposal: According to the "Commission Communication on Technical Guidelines on Waste classifications" **(2018/C 124/01)** the product of Annex III, without impurities, **is not classified** as hazardous waste.. According to the Commission's decision **(2014/955/EU)** and the regulations of the Cabinet of Ministers of the Republic of Latvia No. **302**, the product, without impurities, **is not classified** as hazardous waste (see EWC codes). Incinerate residues in a chemical waste incinerator equipped with an afterburner and smoke treatment equipment. Be especially careful when igniting gas, this material is flammable. In addition to instructions regarding waste disposal, contact your nearest waste manager.

Collection of small and medium quantities of product: Put the remaining product in the collection container. Collection containers must be clearly labeled with a systematic description of the contents. Store containers in a well-ventilated area, away from direct sunlight. Empty the packaging bags or drums, free them of as much product as possible. The package must be cleaned. According to Regulation (EC) No. 1357/2014 empty packaging that is clean of the product cannot be classified as hazardous waste. Reuse or dispose of clean packaging material. If the package contains product, or if the package is contaminated, or if the package cannot be cleaned, dispose of it as unused product. Dispose of the product and its packaging safely in accordance with regional and national

regulations. Waste from product packaging should be handed over to waste management companies. For further instructions, contact your nearest waste manager. Do not discharge the product residues/waste into the sewer and store them in containers suitable for acidic waste or in a container rented/supplied by a waste collection company until disposal. The generation of product waste should be avoided or minimized whenever possible.

Waste codes / waste designations according to EWC: According to the European Waste Catalog (EWC) and the European List of Waste (LoW), the following codes apply to the product:
150102 – Plastic packaging (AN - absolutely harmless);
061099 – Other waste generated during the production process of nitrogen-containing chemicals and mineral fertilizers (MN – mirror entry, non-hazardous);
These codes are indicative only, as they depend on the industry in which the product is used, as well as the intended end use of the user.

Information that applies for discharge into the sewer: Avoid discharge of the substance into sewage systems, water bodies or soil. As well as not getting rid of the substance or its packaging in household waste containers.

Other recommendations for management: The final decision on the relevant waste management, disposal or recycling method, in accordance with regional, national or European legislation and possible adaptation to local legislation, is the responsibility of the waste treatment company. Waste disposal must be carried out in accordance with Directive 2008/98/EC on waste and hazardous waste. Waste disposal must be carried out in accordance with current legislation. Delivery to an approved waste management company. Waste requiring special management. Consult the relevant authorities for disposal of waste. Do not mix with other waste. For recycling, contact the manufacturer. Collect waste separately. Waste must be kept separate from other types of waste until disposal. Regarding waste, it is necessary to check whether a permit is required for its transport. In the case of waste, it is necessary to check whether a permit is required for its transport. To eliminate the product, dilute it with water. Recover wastewater for later processing or for disposal by a waste manager.

14. SECTION - Transport information.

ADR	IMDG	ICAO-TI/IATA-DGR	ADN	RID
14.1. UN Number:				
Not applicable.				
14.2. UN proper shipping name:				
Not applicable.				
Transport document description:				
Not applicable.				
14.3. Transport hazard class(es):				
Not applicable.				
14.4. Packing group:				
Not applicable.				
14.5. Environmental hazards:				
Not classified as environmentally hazardous.				

14.6. Special precautions for users:
Road transport (ADR): Not applicable.
Transport by sea (IMDG): Not applicable.
Air transport (IATA): Not applicable.
Inland waterway transport (ADN): Not applicable.

Rail transport (RID): Not applicable.

14.7. Sea transport of bulk cargoes according to IMO instruments:
Not applicable

15. SECTION - Regulatory information.
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:
EU regulations:
- Regulation (EC) No. 18 of December 2006 of the European Parliament and the Council. **1907/2006** on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH);
- Commission Regulation **(EU) 2020/878** (June 18, 2020), amending Regulation (EC) of the European Parliament and Council No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), Annex II;
- Water Framework Directive (WFD);
- Regulation (EC) of the European Parliament and Council **No. 1272/2008** on classification, labeling and packaging of substances and mixtures (CLP);
- Commission Regulation (EC) **No. 1357/2014** replacing Annex III to Directive 2008/98/EC of the European Parliament and of the Council on waste;
- Regulation no. **649/2012/EU** on export and import of dangerous chemicals **(PIC);**
- European Agreement on the International Carriage of Dangerous Goods by Road **(ADR);**
- European Agreement on the International Carriage of Dangerous Goods by Inland **Waterways (ADN);**
- Commission statement on technical guidelines on waste classification **2018/C124/01;**
- Directive **2008/98/EC** of the European Parliament and the Council of 19 November 2008 on waste and repealing certain directives;
- Parliament and Council Regulation of January 18, 2006 (EC**) No. 166/2006** on the creation of the European Pollutant and Emissions Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC;
- COUNCIL DIRECTIVE **94/33/EC** (June 22, 1994) on the protection of youth work;
- COUNCIL DIRECTIVE **92/85/EEC** (19 October 1992) on the introduction of measures to promote the improvement of safety and health protection at work for pregnant workers, women who work in the postpartum period or women who are breastfeeding.

International regulations:
- International regulations on the transport of dangerous substances by rail **(RID);**
- International Maritime Dangerous Goods Code **(IMDG);**
- International Convention on Prevention of Pollution from Ships **(MARPOL 73/78);**
- **ICAO-TI** - International Civil Aviation Organization transport instructions;
- **IATA-DGR** - Dangerous Goods Regulations of the International Air Transport Association;
- International Code for the Construction and Equipment of Ships Carrying Dangerous **Chemicals (IBC).**

15.2. Chemical safety assessment:
No chemical Safety Assessment has been carried out for this mixture.

16. SECTION - Other information.
16.1. Indication of changes:

Release date of the version:	**02.07.2024.**
Revision date:	**02.07.2024.**
Version:	**2.0.**
Previous version:	**1.0.**
Previous version revision date:	**03.08.2020.**

Date of issue of the document: **03.08.2020.**

The above-mentioned information is based on currently available data that characterizes the product, as well as the manufacturer's experience and knowledge in this field. The information provided is not a description of product quality or a promise of specific properties. The information should be considered as an aid for the safe transportation, storage and use of the product. It does not release the user from responsibility for the incorrect use of the above information and from compliance with all applicable legal standards in this area. The employer is obliged to inform all employees who come into contact with the product about the hazards and personal protective equipment indicated in the safety data sheet. The mixture was classified using the calculation method.

16.2. List of abbreviations and acronyms used throughout the Safety Data Sheet:

CAS – Number according to the "Chemical Abstracts Service" register of chemical substances;
AER – occupational exposure limit value;
ATE – Acute Toxicity Assessment;
OEL – Occupational exposure limit;
DNEL – Derived njo effect level;
PNEC – Predicted no effect contrentation;
STOT – Specific target organ toxicity;
CMR – Carcinogenic, mutagenic and reprotoxic chemicals;
LD50 – Median lethal dose;
LC50 – Median lethal concentration;
EC50 – Half maximal effective concentrtation;
PBT/ vPvB – Persistent, bioaccumulative and toxic and very persistent and very bioaccumulative;
OECD – Organisation for Economic Co-operation and Development;
ppm – parts per million;
BCF - Bioconcentration factor;
Acute Tox 4: Acute toxicity (oral, inhalation), hazard category 4;
Eye Dam. 1: Serious eye damage/eye irritation, hazard category 1.

16.3. Key literature references and sources for data:

The safety data sheet was developed based on the information provided in the safety data sheets of the ingredient manufacturers and suppliers for the substances as components of the mixture, and information available from the ECHA and GESTIS substance databases, as well as from the data provided by the manufacturer.

16.4. Classification of mixtures and used assessment method according to Regulation (EC) 1272/2008 [CLP]:

To classify the product, Regulation (EC) No. Method 4 referred to in Article 9 of 1272/2008: "If only the information referred to in Article 6, paragraph 5 is available, manufacturers, importers and downstream users shall use the linking principles referred to in Annex I, 1.1.3, for assessment purposes section and in each section in Annex I Parts 3 and 4".

16.5. Training consultations: Familiarize yourself with 1. of this safety data sheet; 2nd; 3rd; 4.; 5th; 6.; 7th; 8.; Section 9 and 10. According to Article 35 of the REACH Regulation: "Employees and their representatives shall be given access by the employer to the information provided in accordance with Articles 31 and 32 about the substances or mixtures they use or may be exposed to at work." Personnel working with this product must be trained in possible risks, use of personal protective equipment and first aid. All first aid instructions must be drawn up in accordance with safety and health protection, as well as environmental protection legislation. Observe all safety and hygiene requirements for working with chemicals. First aid instructions in written form must be freely available at the workplace. Persons involved in the trade of hazardous substances must be trained in handling, safety and hygiene.

16.6. Other information: The information provided in this safety data sheet is based on data provided by the product manufacturer, which is believed to be correct. However, no express or implied warranty is given. The information provided is intended only as a guide for safe use, use, processing, storage, transportation and disposal. If the product is mixed with other products or recycled, the information provided in this safety data sheet may not necessarily apply to the new finished product. Regulatory requirements are subject to change and may vary from location to location. The above information is believed to be correct but does not purport to be complete. It is the buyer/user's responsibility to ensure that their actions comply with all local laws. Seller assumes no responsibility for loss or damage resulting from abnormal use, failure to follow recommended practices, or hazards inherent in the nature of the product. Purchasers and users of the product must train all of their employees, agents, contractors and customers who will use this DDL product. This version supersedes all previous documents.

The conditions or methods of product handling, storage, use or disposal are beyond our control and may be beyond our knowledge. For this and other reasons, we assume no responsibility and expressly disclaim liability for any loss, damage or expense incurred or in any way related to the handling, storage, use or disposal of the product. This version supersedes all previous documents. This DDL was prepared and is to be used only for this product. If the product is used as another component of the product, the information in this safety data sheet may not be applicable. In no case can this data be considered as a product specification. The safety data sheet in Latvian has been prepared based on the information contained in the safety data sheet provided by the manufacturer.