

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

PRODUCT NAME: ALUZINC

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

Relevant identified uses: Quick-drying paint for painting different surfaces indoors and outdoors

Uses advised against: Not specified

1.3 Details of the supplier of the safety data sheet:

Manufacturer: **ALNOR Systemy Wentylacji sp. z o.o.**
 Address: ul. Aleja Krakowska 10; 05-552 Wola Mrokwowska, Poland
 Phone No.: +48 22 737 40 00
 E-mail address of the person responsible for the Safety Data Sheet: alnor@alnor.com.pl

1.4 Emergency telephone number:

112 (24-hour emergency hotline)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

The product is classified on the basis of the documentation provided by the manufacturer.

Aerosol 1	H222
Aerosol 1	H229
Acute Tox. 4	H312
Acute Tox. 4	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
STOT SE 3	H336
Aquatic Chronic 2	H411

The product contains /does not contain substances classified as sensitising according to the REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 pursuant to item 3.4 ANNEX I.

2.2 Label elements:



Signal word:

DANGER

Identifier:

Contains
 solvent naphtha (petroleum), light arom.
 acetone
 ethyl acetate
 butyl acetate
 xylene (mixed isomers)

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long-lasting effects.

Additional phrases to be included on the label:

NOT APPLICABLE

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P262	Do not get in eyes, on skin, or on clothing
P273	Avoid release to the environment.
P280	Wear eye protection
P312	Call a doctor if you feel unwell
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Additional information on risks (EU):

Pressurised container. May burst if heated. May form explosive vapour-air mixture.

2.3 Other hazards:

No information on fulfilling the PBT or vPvB criteria according to Annex XIII of the REACH Regulation as amended.

Section 3: Composition/information on ingredients

3.1 Substance:

NOT APPLICABLE

3.2 Mixture:

butane				
REACH No.	01-2119474691-32			
Index No.	601-004-00-0			
EC No.	203-448-7			
CAS No.	106-97-8			
Concentration %	20-30			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Gas 1	H220	GHS02	Danger
	Press. Gas	H280	GHS04	Warning

The substance with the rate of highest-allowed concentration in the work environment determined on the national level.

acetone				
REACH No.	01-2119471330-49			
Index No.	606-001-00-8			
EC No.	200-662-2			
CAS No.	67-64-1			
Concentration %	15-30			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Liq. 2	H225	GHS02	Danger
	Eye Irrit. 2	H319	GHS07	Warning
	STOT SE 3	H336	GHS07	Warning

The substance with the rate of highest-allowed concentration in the work environment determined on the national level.

xylene (mixed isomers)				
REACH No.	01-2119488216-32			
Index No.	601-022-00-9			
EC No.	215-535-7			
CAS No.	1330-20-7			
Concentration %	15-25			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Liq. 3	H226	GHS02	Warning
	Skin Irrit. 2	H315	GHS07	Warning
	Acute Tox. 4	H312	GHS07	Warning
	Acute Tox. 4	H332	GHS07	Warning

The substance with the rate of highest-allowed concentration in the work environment determined on the national level.

butyl acetate				
REACH No.	01-2119485493-29			
Index No.	607-025-00-1			
EC No.	204-658-1			
CAS No.	123-86-4			
Concentration %	1-5			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Liq. 3	H226	GHS02	Warning
	STOTSE 3	H336	GHS07	Warning
	EUH066	-	-	-

The substance with the rate of highest-allowed concentration in the work environment determined on the national level.

ethyl acetate				
REACH No.	01-2119475103-46			
Index No.	607-022-00-5			
EC No.	205-500-4			
CAS No.	141-78-6			
Concentration %	1-5			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Liq. 2	H225	GHS02	Danger
	Eye Irrit. 2	H319	GHS07	Warning
	STOTSE 3	H336	GHS07	Warning
	EUH066	-	-	-

The substance with the rate of highest-allowed concentration in the work environment determined on the national level.

Naphtha (petroleum), hydrotreated heavy (contains less than 0,1 % by weight of 1,3-butadiene (Einecs No. 203-450-8))				
REACH No.	01-2119457273-39			
Index No.	649-327-00-6			
EC No.	265-150-3			
CAS No.	64742-48-9			
Concentration %	1-5			
Classification according to the Regulation (EC) No. 1272/2008	Asp. Tox. 1 EUH066	H304 -	GHS08 -	Danger -

The substance with the rate of highest-allowed concentration in the work environment determined on the national level.

zinc powder, stabilised				
REACH No.	01-2119467174-37			
Index No.	030-001-01-9			
EC No.	231-175-3			
CAS No.	7440-66-6			
Concentration %	10-20			
Classification according to the Regulation (EC) No. 1272/2008	Aquatic Chronic 1 Aquatic Acute 1	H410 H400	GHS09 GHS09	Warnin M=1 g Warnin M=1 g

aluminium powder, stabilised				
REACH No.	01-2119529243-45			
Index No.	013-002-00-1			
EC No.	231-072-3			
CAS No.	7429-90-5			
Concentration %	1-2.5			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Sol. 1 Water-react. 2	H228 H261	GHS02 GHS02	Danger Danger

Solvent naphtha (petroleum), light arom. (contains less than 0,1 % by weight of 1,3-butadiene (Einecs No. 203-450-8))				
REACH No.	01-2119455851-35			
Index No.	649-356-00-4			
EC No.	265-199-0			
CAS No.	64742-95-6			
Concentration %	1-4			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Liq. 3 Asp. Tox. 1 STOTSE 3 STOTSE 3 Aquatic Chronic 3 EUH066	H226 H304 H335 H336 H412 -	GHS02 GHS08 GHS07 GHS07 - -	Warning Danger Warning Warning - -

propane				
REACH No.	Substance exempted from registration (Annex V of the Regulation EC No. 1907/2006 (REACH))			
Index No.	601-003-00-5			
EC No.	200-827-9			
CAS No.	74-98-6			
Concentration %	10-15			
Classification according to the Regulation (EC) No. 1272/2008	Flam. Gas 1 Press. Gas	H220 H280	GHS02 GHS04	Danger Warning

The substance with the rate of highest-allowed concentration in the work environment determined on the national level.

Unclassified ingredients:

Name: CAS No.: EC No.: Concentration [%]

Composition according to the Directive (EC) No. 648/2004:

NOT APPLICABLE

The full text of all relevant hazard statements is presented in Section 16.

Section 4: First aid measures

4.1 Description of first aid measures

General notes:

In case of any concerning symptoms, immediately call a physician or bring the victim to the hospital, present the preparation packaging with the label or the safety data sheet. If the victim is not breathing, perform artificial respiration immediately.

Following inhalation:

Remove person to fresh air. Keep the victim warm and ensure peace. If the symptoms persist, call a doctor. In case of breathing difficulties, administer oxygen.

Following skin contact:

Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. Do not use solvents or thinners. **Following eye contact:**

Rinse with plenty of lukewarm water for several minutes (with eyelids wide open); avoid strong water jet, due to the risk of cornea damage; if one eye is contaminated, protect the other eye from contamination when rinsing. Remove contact lenses while rinsing. Provide the victim with an ophthalmologist consultation.

NOTE: Persons exposed to the risk of eye contamination should be instructed about the need to rinse the eyes and how to do it properly.

Following ingestion:

If the vomiting person is lying on his/her back, put him/her face down. If swallowed, seek medical advice immediately and show the packaging or label. **Protection of the first aiders:**

No action that puts anyone at risk should be taken unless the personnel is properly trained. Always use personal protective equipment.

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

Eye contact: No detailed information.

Inhalation: Respiratory tract irritation manifested by coughing and headache. At prolonged exposure, dizziness, exhaustion, nausea, vomiting and drowsiness may occur.

Skin contact: In case of prolonged contact, skin inflammation or dryness may occur.

Ingestion: No detailed information.

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

Seek immediate medical advice in case of an accident or if you feel unwell. Do not induce vomiting and do not give anything orally to an unconscious person. Show the Safety Data Sheet or label/packaging to the medical personnel providing assistance. Persons providing assistance in an area with an unknown concentration of vapours/mist should be equipped with appropriate respiratory protection.

Section 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: CO₂, extinguishing powder, alcohol-resistant foam, water spray or water mist. The media should be adapted to surrounding materials.

Unsuitable extinguishing media: water jet.

5.2 Special hazards arising from the substance or mixture:

Irritating / toxic gases may form under fire conditions. Inhalation of combustion products leads to serious health risks.

5.3 Advice for firefighters:

Follow the procedures for extinguishing chemical fires. In case of fire involving large quantities of product, remove/evacuate all bystanders from the danger area.

Cool closed containers exposed to fire or heat with water spray from a safe distance, if possible and safely remove them from the danger area. Do not allow wastewater after firefighting to enter sewage system and water bodies. Dispose of the resulting wastewater and fire residues in accordance with the applicable regulations.

Persons involved in firefighting should be trained, equipped with self-contained breathing apparatus and full protective clothing.

Section 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Avoid eye, skin and clothing contamination. Provide ventilation. Remove all ignition sources. Avoid breathing vapour or mist.

Inform people in the surrounding area about the accident. Call the rescue teams. Keep all persons not involved in the emergency action away from the danger area. Evacuate the area, if necessary. Only trained persons equipped with appropriate clothing and protective equipment may take part in the rescue operation.

6.2 Environmental precautions:

If possible and safe, eliminate or limit the release of the product (seal the container or put damaged packaging in an emergency packaging). Do not allow product to enter drains, water or soil. Limit the spread of the product. Notify the relevant health, safety, emergency and environmental services.

6.3 Methods and material for containment and cleaning up:

Clean the surface with cleaning agents. Do not use solvents.

Put the damaged packaging in the replacement packaging. Collect small quantities of the released product in a closed, labelled waste container. Dispose of in accordance with the applicable regulations. If necessary, to dispose of product / absorbent material contaminated with the product, use the assistance of specialised companies for transport and disposal of waste.

6.4 Reference to other sections:

For appropriate personal protective equipment, see Section 8. Information on disposal considerations, see Section 13. For safety precautions, see Section 7.

Section 7: Handling and storage:

7.1 Precautions for safe handling:

Do not breathe vapours or sprayed mist. Avoid skin and eye contamination. Take precautionary measures against static discharges. Prevent the formation of vapour concentrations in air within flammability or explosive levels. Avoid exceeding the permissible concentration values at the workplace. Do not spray on an open flame or smouldering material. Use only in well-ventilated areas.

Store away from heat and ignition sources. No smoking. Vapours may form explosive mixtures with air. Vapours are heavier than air and may be deposited on the ground. Electrical equipment should be protected according to standards.

NOTE: Wear personal protective equipment as described in Section 8 of the Safety Data Sheet.

7.2 Conditions for safe storage, including any incompatibilities:

Pressurised container: protect from sunlight and heat above 50°C. Do not pierce or burn, even after use. Observe the regulations for storing aerosols!

- When using and storing this product, the provisions of the Regulation of the Minister of Interior and Administration of 7 June 2010 on Fire Protection of Buildings and of Other Construction Objects or Premises (Journal of Laws 2010.109.719) should be observed.
- Pay attention to the warnings on the labels.
- Store only in certified, original, properly labelled, sealed packaging.
- Prohibit unauthorised access.
- Close the open containers carefully and hold them upright.
- Store on a hard surface.
- Store in a dry, cool, well-ventilated room.
- Store away from strong oxidising agents, strong bases, and strong acids.
- Do not release the contents of the containers into sewage system, surface water or groundwater (this also applies to the disposal of empty containers).

- Recommended storage temperature 0 - 25°C.

7.3 Specific end use(s):

Application according to the information provided by the manufacturer or distributor.

Section 8: Exposure controls/personal protection:

8.1 Control parameters:

Legal basis:

Regulation of the Minister of Labour and Social Policy of 6 June 2014 on Maximum Permissible Concentration and Intensity of Agents Harmful to Health in the Working Environment (Journal of Laws of 2014.0.817)

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the Protection of the Health and Safety of Workers from the Risks Related to Chemical Agents at Work (OJ L 142 of 16/06/2000, CELEX 32000L0039)

CAS	Chemical agent name	Limit values			
		TLV (TWA)		TLV (STEL)	
		mg/m ³	ppm	mg/m ³	ppm
67-64-1	acetone Poland	600		1800	
74-98-6	propane Poland	1800			
1330-20-7	xylene (mixed isomers) Poland	100		655	
64742-48-9	Naphtha (petroleum), hydrotreated heavy Poland	300		900	
106-97-8	butane Poland	1900		3000	
123-86-4	butyl acetate Poland	200		950	
141-78-6	ethyl acetate Poland	200		600	

DNEL

No detailed information.

PNEC

No detailed information.

Recommendations on monitoring procedures of hazardous components content in the air - measurement methodology:

- Regulation of the Minister of Health of 2 February 2011 on Examinations and Measurements of Factors Harmful to Health in the Working Environment. (Journal of Laws 2011.33.166).
- PN-89/Z-01001/06. Air purity protection. Names, terms and units. Terminology for air quality tests at workplaces.
- PN Z-04008-7:2002. Air purity protection. Sampling methods. Principles of air sampling in workplace and interpretation of results.
- PN-EN-689:2002. Workplace Atmospheres - Guidance for The Assessment of Exposure by Inhalation to Chemical Agents for Comparison with Limit Values and Measurement Strategy.
- PN ISO 4225/AK: 1999 Air quality – General aspects – Vocabulary (national sheet).

- PN-89/Z-01001/06 Air purity protection. Names, terms and units. Terminology for air quality tests at workplaces.
 Note: When the substance concentration is determined and known, individual protection measures should be selected, taking into account the concentration of the substance present in a given work station, exposure time and activities performed by the employee. In an emergency situation, if the substance concentration in the work station is unknown, use personal protective equipment with the highest recommended protection class. The employer must ensure that the personal protective equipment and working clothes and footwear used have protective and functional properties and that they are properly washed, maintained, repaired and disinfected. Recommended preliminary and periodic examinations of employees should be carried out in accordance with the Regulation of the Minister of Health and Social Welfare of 30 May 1996 on Carrying out of Medical Examinations of Workers, to the Extent of the Preventive Health Care for Workers, as well as on Medical Decisions Issued to Such Ends Provided for by the Labour Code (Journal of Laws 1996.69.332, as amended; Journal of Laws 2015.0.457).

8.2 Exposure controls:

Observe general rules of safety and hygiene. Do not eat, drink or smoke when working. Wash hands before meals and after work. Wash contaminated clothing before reuse. Avoid skin, eye and clothing contamination. Avoid breathing vapour or aerosols. Provide effective local ventilation at work stations and general ventilation. Process enclosure. Ventilation and electrical installation in explosion-proof design.

Respiratory system protection:

In case of inadequate ventilation, use masks with type A cartridge (EN 14387), the cartridge colour should be brown or breathing apparatus insulating respiratory tract. Use self-contained breathing apparatus when working in confined spaces, insufficient oxygen content in the air, high uncontrolled emissions or other circumstances where a mask with a cartridge does not provide sufficient protection.

Skin and body protection:

Protective clothing consisting of a sweatshirt fastened at the neck, fastened cuffs and trousers lined with boots. Oil-resistant, non-slip safety footwear. In areas where there is a potentially explosive atmosphere, both outer clothing and footwear should be able to discharge static electricity. In order to protect exposed skin, it is recommended to use moisturising creams, but they should not be used immediately after contact with the product.

Hand protection:

Wear gloves providing full chemical protection in accordance with EN 374. It is advisable to change gloves regularly and replace them immediately if there are any signs of wear, damage (tears, perforations) or changes in appearance (colour, flexibility, shape). Recommended material: butyl rubber, nitrile rubber

Thickness: 0.3 mm

Breakthrough time: 75-80 min

Eye/face protection

In the event of prolonged exposure or risk of eye contamination, wear goggles according to EN 166. It is recommended to equip the workplace with an eye wash fountain.

Thermal hazards:

Heating can cause the release of dangerous gases. A flame or intense heat can cause the packaging to burst.

Environmental exposure controls:

The product should not be released into the environment. In the case of product contamination of rivers, lakes or waste water, notify the relevant authorities.

Section 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

Parameter	Value
Form (20°C)	Aerosol
Colour	Silver
Odour	Characteristic
Odour threshold	Not marked
pH	Not marked
Melting/freezing point (°C, 1013 hPa)	<90
Boiling point (°C, 1013 hPa)	126
Flash point (°C)	27
Evaporation rate	Not marked
Explosion limit [% v/v]: górna lower	13.0 (propane) 1.0
Flammability	Extremely flammable
Vapour pressure (hPa)	Not marked
Vapour density (air = 1)	Not marked
Density (g/cm ³)	0.89-1.01
Solubility in other solvents:	Most organic solvents (aromatic hydrocarbons, esters, ketones)
Solubility in water	Immiscible
Partition coefficient: n-octanol/water	Not marked
Decomposition temperature (°C)	Not marked

Auto-ignition temperature (°C)	>370
Viscosity kinematic (mm ² /s, 40°C) dynamic (cPs) 4 mm Ford Viscosity Cup (s, 23°C)	Not marked
Explosive properties	In use, may form flammable/explosive vapour-air mixture. Vapours are heavier than air, they can deposit on the ground in large areas. When encountering distant sparks, they can ignite or explode.
Oxidising properties	Not marked

9.2 Other information:

No detailed information.

Section 10: Stability and reactivity:

10.1 Reactivity

No detailed information.

10.2 Chemical stability

The product is stable under normal ambient conditions as well as at the expected temperature and pressure during storage and handling.

10.3 Possibility of hazardous reactions

Under recommended conditions of storage and use, no dangerous reactions should occur. Vapours may form explosive mixtures with air.

10.4 Conditions to avoid:

Sources of heat, open fire and sparks, direct sunlight, temperatures above 50°C.

10.5 Incompatible materials

Strong oxidising agents.

10.6 Hazardous decomposition products

Dense black smoke containing carbon dioxide (CO₂), carbon monoxide (CO).

Section 11: Toxicological information:

This product has been evaluated according to the usual method laid down in the European Union Directive and classified for toxicity. Details are given in Sections 2 and 3.

11.1 Information on toxicological effects

Acute toxicity:

Oral:

acetone: LD50> 2000 mg / kg (rat)
Xylene (mixed isomers): LD50> 2000 mg / kg
butyl acetate: LD50 14000 mg / kg (rat)

Inhalation:

acetone: LC50> 20 mg / kg (rat)
Xylene (mixed isomers): LC50> 5 mg / l

Dermal:

acetone: LD50> 2000 mg / kg (rat)
Xylene (mixed isomers): LD50> 2000 mg / kg
butyl acetate: LD50 5000 mg / kg (rabbit)

Acute toxicity (other routes of administration): No available data

Skin corrosion/irritation: May cause skin irritation

Serious eye damage/irritation: May cause irritation

Respiratory or skin sensitisation: May cause sensitisation by skin contact

Germ cell mutagenicity: No detailed information

Carcinogenicity: No detailed information

Reproductive toxicity: No detailed information

Specific target organ toxicity (STOT) - single exposure: No detailed information

Specific target organ toxicity (STOT) - repeated exposure: No detailed information

Aspiration hazard: No detailed information

Section 12: Ecological information:

For more information on possible environmental impacts, see Section 2.1. (classification). No data for the finished product was evaluated based on the data of the individual ingredients.

12.1 Toxicity:

Do not allow the product to enter the surface water, water bodies or sewage systems in large quantities.

Toxicity for fish:

acetone:	LC50 > 1000 mg / l
Xylene (mixed isomers):	LC50 1-10 mg / l
butyl acetate:	LC50 141 mg / l
zinc powder, stabilised:	LC50 2.72 µg / l

Toxicity for daphnia and other aquatic invertebrates

acetone:	LC50 > 1000 mg / l
Xylene (mixed isomers):	LC50 1-10 mg / l
butyl acetate:	EC50 24 mg / l
zinc powder, stabilised:	LC50 65 µg / l

Toxicity for algae:

Xylene (mixed isomers):	LC50 1-10 mg / l
zinc powder, stabilised:	LC50 106 µg / l

Toxicity for bacteria

Xylene (mixed isomers):	LC50 1-10 mg / l
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12.2 Persistence and degradability.

butyl acetate: biodegradability: 98 % (Closed Bottle test).

12.3 Bioaccumulative potential.

butyl acetate: bioconcentration factor BCF = 3.1.

12.4 Mobility in soil.

No detailed information

12.5 Results of PBT and vPvB assessment

No detailed information

12.6 Other adverse effects.

No detailed information

Section 13: Disposal considerations:

13.1 Waste treatment methods

Product/Packaging disposal:

Disposal: In accordance with local and national regulations.

Packaging: Empty the aerosol cans (including filling gas) Containers that have not been emptied in accordance with the regulations are special waste.

NOTE: As the waste code is assigned according to the origin of the waste, the end user should, taking into account the specific conditions of use of the product, define the resulting waste and assign the appropriate code, in accordance with the applicable regulations.

The following Waste Codes are only suggestions:

Waste Code (EWC):	080111* waste paint and varnish containing organic solvents or other hazardous substances
Disposal of uncleaned packaging:	Waste code (uncleaned packaging):
Steel can code:	15 01 05
Carton code:	20 01 01
Lid code:	20 01 39

Remove any residual product, as even a small amount of the mixture in the container can explode at temperatures above 50 °C. Do not dispose of to sewage systems. Avoid contamination of surface and ground waters. Waste product should be recovered or disposed of in authorised incineration plants or waste treatment/disposal plants, in accordance with applicable regulations.

Recovery/recycling/disposal of packaging waste should be conducted in accordance with the regulations in force.

NOTE: Only packaging that is completely emptied and cleaned can be recycled! Use the services of companies with the appropriate authorisations.

Legal basis:

The Act of 14 December 2012 on Waste (Journal of Laws 2013.0.21, as amended)

The Act of 13 June 2013 on Packaging and Packaging Waste Management (Journal of Laws 2013.0.888)

Regulation of the Minister of Environment of 9 December 2014 on the Waste Catalogue (Journal of Laws 2014.0.1923)

Section 14: Transport information:

The product is subject to the regulations on the carriage of dangerous goods contained in ADR (road transport), RID (rail transport), ADN (inland waterway transport), IMDG (maritime transport), ICAO/IATA (air transport).

14.1 UN Number	ADR: 1950 RID: 1950 IMDG: 1950 IATA: 1950
14.2 UN proper shipping name	ADR: AEROSOLS, flammable RID: AEROSOLS, flammable IMDG: AEROSOLS IATA: AEROSOLS, flammable
14.3 Transport hazard class(es)	ADR: 2 RID: 2 IMDG: 2.1 IATA: 2.1
14.4 Packing group	ADR Classification code: 5F Stickers: 2.1 Limited quantities: 1.00 L Restriction code for carriage through tunnels: (D) RID Classification code: 5F Hazard identification number: 23 Stickers: 2.1 Limited quantities: 1.00 L IMDG Stickers: 2.1 EmS Number: F-D, S-U IATA Packing instructions (air freight transport): 203 Packing instructions (passenger air transport): 203 Packaging instructions (LQ): Y203 Stickers: 2.1
14.5 Environmental hazards	ADR Environmentally hazardous: yes RID Environmentally hazardous: yes IMDG Substance likely to cause marine pollution: yes IATA Dangerous to the environment: no
14.6 Special precautions for users	See Section: 6, 7 and 8
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable to the product as delivered.

Section 15: Regulatory information:

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

1. Regulation (EC) No. 1907/2006 (Annex II - Guidance on the compilation of Safety Data Sheets)
2. Commission Regulation (EU) No. 453/2010 of 20 May 2010 amending the Regulation (EC) No. 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (OJ L 133 of 31/05/2010, CELEX 32010R0453)
3. Commission Regulation (EC) No. 790/2009 of 10 August 2009 amending, for the purposes of its adaptation to technical and scientific progress Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (OJ L 235 of 05/09/2009, CELEX: 32009R0790)
4. Commission Regulation (EU) No. 286/2011 of 10 March 2011 amending, for the purposes of its adaptation to technical and scientific progress, the Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (OJ L 83 of 30/03/2011, CELEX: 32011R0286)
5. Commission Regulation (EU) No. 618/2012 of 10 July 2012 amending, for the purposes of its adaptation to technical and scientific progress, the Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (OJ L 179 of 11/07/2012, CELEX: 32012R0618)
6. Commission Regulation (EU) No. 487/2013 of 8 May 2013 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on Classification, Labelling and Packaging of Substances and Mixtures (OJ L 149 of 01/06/2013, CELEX: 32013R0487)
7. Commission Regulation (EU) No. 944/2013 of 02 October 2013 amending, for the purposes of its adaptation to technical and scientific progress, the Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (OJ L 261 of 03/10/2013, CELEX: 32013R0944)
8. Commission Regulation (EU) No. 605/2014 of 5 June 2014 amending, for the purposes of introducing hazard and precautionary statements in the Croatian language and its adaptation to technical and scientific progress, the Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (Journal of Laws L 167 of 06/06/2014, CELEX: 32014R0605)
9. Commission Regulation (EU) 2015/1221 of 24 July 2015 amending Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, for the purposes of its adaptation to technical and scientific progress (Journal of Laws L 197 of 25/07/2015, CELEX: 32015R1221)
10. Commission Regulation (EU) 2016/918 of 19 May 2016 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (Journal of Laws L 156 of 14/06/2016, CELEX: 32016R0918)
11. Commission Regulation (EU) 2016/1179 of 19 July 2016 amending, for the purposes of its adaptation to technical and scientific progress, Regulation (EC) No. 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures (Journal of Laws L 195 of 20/07/2016, CELEX: 32016R1179)
12. 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)
13. Regulation of the European Parliament and of the Council (EC) 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 L 353 of 31/12/2008, CELEX 32008R1272)
14. 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 (OJ L 396 of 30/12/2006, CELEX 32006R1907)
15. Directive of the European Parliament and of the Council 2008/98/EC of 19 November 2008 on waste and repealing certain Directives (OJ L 312 of 22/11/2008, CELEX 32008L0098)
 16. Regulation of the European Parliament and of the Council (EC) No. 1005/2009 of 16 September 2009 on substances that deplete the ozone layer (OJ L 286 of 31/10/2009, CELEX 32009R1005)
 17. Directive 2008/68/EC of the European Parliament and of the Council of 24 September 2008 on the inland transport of dangerous goods (OJ L 260 of 30/09/2008, CELEX 32008L0068)
 18. Act of 25 February 2011 on the chemical substances and their mixtures (Journal of Laws 2011.63.322)
 19. Act of 19 August 2011 on the carriage of dangerous goods (Journal of Laws 2011.227.1367)
 20. Act of 20 June 1997 - Law on road traffic (Journal of Laws 1997.98.602, as amended)
 21. The Act of 14 December 2012 on Waste (Journal of Laws 2013.0.21, as amended)
 22. Act of 13 June 2013 on Packaging and Packaging Waste Management (Journal of Laws 2013.0.888)
 23. Regulation of the Minister of Construction of 14 July 2006 on Obligations of Industrial Sewage Providers and Conditions for Releasing Sewage into Sewerage Systems (Journal of Laws 2006.139.964)
 24. Regulation of the Minister of Labour and Social Policy of 6 June 2014 on Maximum Permissible Concentration and Intensity of Agents Harmful to Health in the Working Environment (Journal of Laws of 2014.0.817)
 25. Notice of the Minister of Health of 12 January 2015 on the announcement of the consolidated text of the Regulation of the Minister of Health on the Criteria and Method of Classification of Chemical Substances and their Mixtures (Journal of Laws 2015.0.208)
 26. Notice of the Minister of Health of 2 March 2015 on the announcement of the uniform text of the Regulation of the Minister of Health the Labelling of Packaging of Hazardous Substances and Mixtures and Certain Mixtures (Journal of Laws 2015.0.450) Regulation of the Minister of Health of 22 May 2012 on the Method of Marking Sites, Pipelines and Containers and Tanks Used for Storage or Containing Dangerous Substances or Mixtures (Journal of Laws 2012.0.601)
 27. Regulation of the Minister of Health of 22 May 2012 on the Method of Marking Sites, Pipelines and Containers and Tanks Used for Storage or Containing Dangerous Substances or Mixtures (Journal of Laws 2012.0.601)
 28. Regulation of the Minister of Health of 2 February 2011 on Testing and Measurement of Harmful Factors in the Working Environment (Journal of Laws 2011.33.166)
 29. Regulation of the Minister of Health of 30 December 2004 on Occupational Health and Safety Related to the Presence of Chemical Factors at the Workplace (Journal of Laws 2005.11.86)
 30. Regulation of the Minister of Economy and Labour of 4 August 2004 on the Detailed Method of Handling Waste Oils (Journal of Laws 2004.192.1968)
 31. Regulation of the Minister of Environment of 9 December 2014 on the Waste Catalogue (Journal of Laws 2014.0.1923)
 32. Regulation of the Minister of Environment of 18 November 2014, on Conditions that Have to Be Fulfilled while Discharging Sewage to Waters or Soil and on Substances Particularly Harmful to the Aquatic Environment (Journal of Laws 2014.0.1800)
 33. Regulation of the Minister for Internal Affairs and Administration of 7 June 2010, on Fire Protection of Buildings and of Other Construction Objects or Premises (Journal of Laws 2010.109.719).

Seveso III: Directive of the European Parliament and of the Council 2012/18/EC on the Control of Major-Accident Hazards Involving Dangerous Substances.

Category	Threshold value for lower-tier establishment	Threshold value for upper-tier establishment
FLAMMABLE AEROSOLS	150 t	500 t
Petroleum products and alternative fuels a) gasolines and naphthas, b) kerosenes (including jet fuels), c) gas oils (including diesel fuels, home heating oils and gas oil blending streams) d) heavy fuel oil (da) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)	2500 t	25000 t
HAZARDOUS TO THE AQUATIC ENVIRONMENT	200 t	500 t

15.2 Chemical safety assessment:

No chemical safety assessment has been carried out for the product.

Section 16: Other information:

The data contained in the sheet refer to the product in its commercial form.

The update concerns Section 2.

Full text of the hazards statements listed in Section 2 and 3 of the Safety Data Sheet:

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H229	Pressurised container: May burst if heated.
H261	In contact with water releases flammable gas.
H280	Contains gas under pressure
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long-lasting effects.
H411	Toxic to aquatic life with long-lasting effects.
H412	Harmful to aquatic life with long-lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Hazard classes and category codes:

Acute Tox. 4	Acute toxicity	Category	4
Aerosol 1	Aerosol product	Category	1
Aquatic Acute 1	Hazardous to the aquatic environment	Category	1
Aquatic Chronic 1	Hazardous to the aquatic environment	Category	1
Aquatic Chronic 2	Hazardous to the aquatic environment	Category	2

Aquatic Chronic 3	Hazardous to the aquatic environment	Category	3
Asp. Tox. 1	Aspiration hazard	Category	1
Eye Irrit. 2	Serious eye damage/ irritation	Category	2
Flam. Gas 1	Flammable gas	Category	1
Flam. Liq. 2	Flammable liquid	Category	2
Flam. Liq. 3	Flammable liquid	Category	3
Flam. Sol. 1	Flammable solid	Category	1
Press. Gas	Gas under pressure		
Skin Irrit. 2	Skin corrosion/irritation	Category	2
STOT SE 3	Specific target organ toxicity — single exposure	Category	3
Water-react. 2	Substance or mixture which in contact with water emits flammable gas	Category	2

Explanation of abbreviations and acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ASTM	American Society for Testing and Materials
BGW	“Biologischer Grenzwert” (biological threshold value, Germany)
CAS	Unique identification number assigned to substances by the Chemical Abstract Service
DIN	“Deutsches Institut für Normung” - German Institute for Standardisation
DNEL	Derived No-Effect Level
EC50	Concentration which in 50 % of the test population induces an effect other than the death of organisms.
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
ISO	International Standards Organisation
LC50	Concentration that is lethal to 50% of the population exposed
LD50	Dose that is lethal to 50% of the population exposed
LDL0	Lowest lethal dose.
TLV	Threshold Limit Value
TLV-STEL	Threshold Limit Value - Short-term exposure limit
TLV-C	Threshold Limit Value - Ceiling limit
NIOSH	The U.S. National Institute for Occupational Safety and Health
NOEC	The highest concentration of the toxicant that does not cause any perceptible changes in the test organisms during the specified test period.
OSHA	Occupational Safety & Health Administration
PBT	persistent, bioaccumulative and toxic (substance)
PEL	Permissible Exposure Limits
PNEC	Predicted No Effect Concentration
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
STEL	Short-Term Exposure Limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

The above-mentioned information was prepared based on the currently available data providing the characteristics of the product and the manufacturer's knowledge and expertise in this regard. This information does not constitute a qualitative description of the product or a guarantee of specific properties. It should be regarded as a support to safe handling during storage, use and transport of the product. The foregoing does not relieve the user from the liability for improper use of the above mentioned information and from the obligation to observe all standards applicable in this field.

The employer is obliged to inform all employees who come into contact with the product at their workstation on the hazards and personal protective measures specified herein. The product may not be used for any purpose other than that specified in Section 1 of the Safety Data Sheet without written permission.

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