MATERIAL SAFETY DATA SHEET

according to Regulation EC No. 1907/2006 (REACH), Regulation EC No. 1272/2008 (CLP) and Commission Regulation EU No. 453/2010

Name of the product		ZENICO	LOR 5		Page:
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SEC	TION 1: IDENTIFICATION (OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING					
1.1	Product identifier						
	Product name:	ZENICOLOR 5					
	Registration number:	not required, the product is a mixture, not a compound					
	Other means of identification:	not set					
1.2	Relevant identified uses of t	the substance or mixture and uses advised against					
	Identified uses:	colourant for soap manufacturing					
	Uses advised against:	not set					
1.3	Details of the supplier of the	e safety data sheet					
	Distributor (SK): (responsible for marketing in Slovak Republic)	ZENI Holding s.r.o. Špitálska 53 Bratislava - Staré mesto 811 01 e-mail: info@zeniholding.eu www.zenicolor.com					
	Competent person responsible	e for the safety data sheet: PharmDr. Vladimír Végh, PHARMIS, info@pharmis.sk					
SEC	National Toxicological Information Centre (NTIC), FNsP, Limbová 5, 833 05 Bratislava 37, Slovak Republic, tel.: 00421 (0)2 5477 4166; tel.: 00421 (0) 2 5477 4605, (24 h non-stop), www.ntic.sk ECTION 2: HAZARDS IDENTIFICATION						
	ral classification of the mixture/2006/EC and 1272/2008/EC.	e: the mixture is not classified as hazardous in accordance with 67/548/EEC, 1999/45/EC or					
		Based on composition, no adverse effects for human health are expected for the mixture; therefore the mixture is not considered as dangerous for human health. There are no hazards under normal use conditions. Direct contact with eyes may cause slight and temporary irritation. Swallowing of larger amounts may lead to stomachache, vomiting or diarrhea.					
		Based on composition, no adverse effects in the environment are expected for the mixture; therefore the mixture is not considered as dangerous for the environment.					
2.1	Classification of the substar	nce or mixture					
	Classification (67/548/EEC / 1999/45/EC)	The mixture is not classified as hazardous.					
	Classification (1272/2008/EC)	The mixture is not classified as hazardous.					
2.2	Label elements						
	Contains:	not required					

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not required	
not required	
not required	
not required	
	not required not required

2.3 Other hazards

Results of PBT and vPvB assessment: The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII; the substances in the mixture are not included in the Candidate List of SVHC.

Contaminated surfaces may be slippery

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances does not apply

3.2 Mixtures

Substances presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List:

Substance REACH Registration number	Content (% w/w)	EC Number CAS Number Index Number	Classification 67548/EEC 1999/45/EC*	Classification 1272/2008/EC*		Exposure limits
glycerine REACH No. not available yet	10 - 30	200-289-5 56-81-5 -	not classified as hazardous	not classified as hazardous	0	Exp. lim. (nat./SVK) see 8.1
sodium laureth sulphate (C10-16- fattylalcohols, ethoxylated, sulphates, sodium salts) REACH No. not available yet	5 - 12,5	500-223-8 68585-34-2	Xi; R36/38	Skin Irrit. 2 Eye Irrit. 2	H315 H319	-
sodium xylene sulfonate REACH No. not available yet	2,5 - 5	215-090-9 1300-72-7 -	Xi; R36/38	Skin Irrit. 2 Eye Irrit. 2	H315 H319	-
sodium lauryl sulfate REACH No. not available yet	1 - 2,5	205-788-1 151-21-3 -	Xn; R22 Xi; R36/38	Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2	H302 H315 H319	-

^{*} For full wording of used Risk Phrases (R-phrases) and Hazard Statements (H-phrases) see Section 16.e.

Other compounds

Other substances not presenting a health or environmental hazard within the meaning of the Dangerous Substances Directive 67/548/EEC or Regulation (EC) No. 1272/2008, without a Community workplace exposure limit, not classified as PBT/vPvB or included in the Candidate List:

Substance	Content	EC Number
REACH Registration number	(% w/w)	CAS Number
		Index Number

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propylene glycol (propan-1,2-diol) 01-2119456809-23-0012	15 - 35	200-338-0 57-55-6 -
sodium stearate REACH No. not available yet	15 - 30	212-490-5 822-16-2 -
fatty acids, coco, sodium salts REACH No. not available yet	2,5 - 5	263-050-4 61789-31-9 -
stearic acid REACH No. not available yet	1 - 5	200-313-4 57-11-4 -

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Health hazard is minimal; the product is not irritating, corrosive, volatile nor toxic. Effects of over exposure: There are no hazards under normal use conditions. Observe all user considerations and safety measures stated on the packaging. In case of any health problem or uncertainty seek medical attention and provide information from this Material Safety Data Sheet. Unconscious persons place in the stabilized position and observe the breathing. Never give any fluids to unconscious persons.

Inhalation:	Inhalation of vapours is not expected to cause any adverse effects. In case of individual problems following the aerosols inhalation, remove the affected persons to a fresh air. Administer oxygen or artificial respiration if there is difficulty breathing; until medical attendance. Seek medical advice if the symptoms persist.
Skin contact:	Remove all soiled or stained clothing. Wash the affected area immediately and repeatedly with soap and water. Seek medical advice if the skin irritation persists.
Eye contact:	Keep eyelids open and rinse immediately and repeatedly with copious amount of water for at least 5 - 10 minutes. Remove contact lenses if present. Seek medical advice if the irritation persists.
Ingestion:	Wash mouth with water; give some water to drink (only if the affected person is conscious). Do not induce vomiting! In case of spontaneous vomiting avoid aspiration of the vomits. Get medical attention if symptoms persist and show this Material Safety Data Sheet, product package or label!

4.2 Most important symptoms and effects, both acute and delayed

There are no hazards under normal use conditions. Direct contact with eyes may cause slight and temporary irritation. Swallowing of larger amounts may lead to stomachache, vomiting or diarrhea. Attention in case of vomiting - acute danger of suffocating, produced by foaming ingredients.

4.3 Indication of any immediate medical attention and special treatment needed No specific therapy known. Use supportive and symptomatic treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1	Extinguishing media	
	Suitable extinguishing media:	water spray, foam, dry-powder, carbon dioxide
	Unsuitable extinguishing media:	direct water stream

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5.2 Special hazards arising from the substance or mixture

Non-flammable - water solution. Upon water evaporation - incomplete combustion and high-temp thermolysis may produce toxic, irritating and flammable decomposition products (such as carbon monoxide, carbon dioxide, sooth, aldehydes and other products of organic compounds decomposition, sulphur oxides etc.).

5.3 Advice for fire-fighters

<u>Fire Fighting Procedures:</u> Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Fight fire from protected location or safe distance. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during firefighting operations. If contact is likely, change to full chemical resistant firefighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Observe all user considerations and safety measures. No special requirements are needed under normal use conditions.

Avoid contact with skin, eyes and mucous membranes. According to the release scale use appropriate other personal protection (gloves, mask, protective clothes, see Section 8). All unprotected persons should be restraint. Do not inhale vapours or decomposition products. Ensure adequate ventilation in closed areas. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

6.2 Environmental precautions

Stop leak if you can do so without risk. Confine the spill immediately with booms. Avoid entering soil, drains, surface-and ground-waters. In case of serious leakage inform appropriate authorities.

6.3 Methods and materials for containment and cleaning up

Soak up the rests with inert absorbent material (sand, diatomite, kaolin, vapex...). Collect in suitable and properly labeled containers. Dispose according to valid legislation; send to wastes treatment facility (see section 13). Clean up affected areas with lots of water and detergent.

6.4 Reference to other sections

Adhere to instructions in the section 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe all user considerations and safety measures. No special requirements are needed under normal use conditions. Avoid contact with eyes and mucous membranes. Avoid long-term contact with skin. Avoid eating, drinking, and smoking during handling. See Section 8 for advice on the minimum requirements for personal protective equipment. Avoid breathing vapour or decomposition products. Ensure appropriate ventilation during handling.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original packages or other appropriately labeled and tightly closed containers. Keep away from direct sunlight and heat sources. Protect from freezing. Recommended storage temperature: 5 - 35°C. Store away from oxidative compounds and strong acids. Keep out of the reach of children. Keep away from food, beverages and forage.

7.3 Specific end uses

not specified

Control parameters

8.1

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Other recommended values: not set CAS Substance name OEL - equivalents	CAS	Substance name	NPEL	
Indicative occupational exposure limit ES (20 10/39/EC, Directive 2006/15/EC and Directive 2009/161/EC): not set CAS Substance name OEL		1 .	MDEL	10 3
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CAS Substance name OEL CAS Substance name OEL - equivalents			NPEL SHORt-terr	-
CAS Substance name OEL CAS Substance name OEL - equivalents				
Other recommended values: not set CAS Substance name OEL - equivalents	Indicative of	occupational exposure limit	ES (20 10/39/EC, Directiv	ve 2006/15/EC and Directive 2009/161/EC): not set
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Other recommended values: not set CAS Substance name OEL - equivalents				
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fresh water sediment: 572 mg/kg dw	End Use: Coroutes of exproutes of exproutes of exproprience of the proprience of the	General Population Exposure: inhalation, long term Exposure: inhalation, long term Exposure: set for the mixture. Compound	m, systemic effects: n, local effects:	10 mg/m ³ 50 mg/m ³ 10 mg/m ³ 260 mg/l, assessment factor - 50
	End Use: Coroutes of expoutes of expoutes of exponence of the propylene of the fresh water sea water:	General Population Exposure: inhalation, long term Exposure: inhalation, long term Set for the mixture. Compound Edycol :	m, systemic effects: n, local effects:	10 mg/m ³ 50 mg/m ³ 10 mg/m ³ 260 mg/l, assessment factor - 50 26 mg/l, assessment factor - 500
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sea sediment: 57.2 mg/kg dw	End Use: Coroutes of exproutes of exproper season water:	General Population Exposure: inhalation, long terr Exposure: inhalation, long terr Set for the mixture. Compoundlycol : Timittent releases:	m, systemic effects: n, local effects:	10 mg/m ³ 50 mg/m ³ 10 mg/m ³ 260 mg/l, assessment factor - 50 26 mg/l, assessment factor - 500 183 mg/l, assessment factor -100

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soil: 50 mg/kg dw

sewage treatment plant: 20000 mg/l, assessment factor -1

food / oral intake: 1133 mg/kg, assessment factor -30

8.2 Exposure controls

Ensure exposure controls in accordance with the Act 124/2006 Coll. (SK) on Occupational Safety and Health Protection. Adhere to Gov. Direction SR No. 355/2006 Z.z., as of later amendments of Gov. Direction SR No. 471/2011 Z.z..

Appropriate engineering controls:

Avoid contact with skin, eyes and mucous membranes. Ensure adequate ventilation. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

<u>Individual protection measures, such as personal protective equipment:</u> a)

Eye / face protection

If contact is likely, safety glasses with side shields are recommended (EN 166). Chemical type goggles should be worn during misting operations.

b) Skin protection:

If prolonged or repeated contact is likely, chemical-resistant gloves are recommended. If contact with forearms is likely, wear gauntlet-style gloves. CEN standards EN 420 and EN 374 provide general requirements and lists of glove types. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves.

c) Respiratory protection:

No special requirements are needed under normal use conditions. Do not inhale vapours or aerosols. Ensure appropriate ventilation or exhaustion at the workplace. If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include: half-face filter respirator, type AP filter (European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 (STN EN 14387+A1) provide filter recommendations).

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded. d) Thermal hazards:

No such risk when normally used.

Environmental exposure controls:

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

All storage and manipulation are have to be equipped for the sanation of possible leakage. See information in sections 6 and 12. Adhere to requirements of the Act No. 137/2010 Coll. on air protection (*Air Act*) as amended and the Act No. 364/2004 Coll. on waters (*Water Act*) as amended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties



9.2

SEC

10.1

10.2

10.3

known.

Possibility of hazardous reactions Not

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Properties	value	method / condition
Appearance:	paste	20°C
Colour:	various, according specifications	-
Odour:	none	-
Odour threshold:	information not available	-
pH:	information not available	-
Melting point/freezing point:	information not available	-
Initial boiling point and boiling range:	information not available	-
Flash point:	information not available	-
Evaporation rate:	information not available	-
Flammability (solid, gas)	information not available	-
Upper/lower flammability or explosive limits:	information not available	-
Vapour pressure:	information not available	-
Vapour density:	>1	relative, air = 1
Relative density:	information not available	
Solubility/ies:	good soluble in water	water, 20°C
Partition coefficient: n-octanol/water:	information not available	-
Auto-ignition temperature:	information not available	-T E
Decomposition temperature:	information not available	-
Viscosity:	information not available	-
Explosive properties:	not explosive	-
Oxidising properties:	no oxidative properties	-
Other information	·	
-	-	-
ION 10: STABILITY AND REACTIVITY		
Reactivity The mixture is not reactive under normal condition	s of storage and use.	
Chemical stability Mixture is chemically stable under normal condition	ons of storage and use. Overheating may cause	thermal decomposit

WINDING

MATERIAL SAFETY DATA SHEET

according to Regulation EC No. 1907/2006 (REACH), Regulation EC No. 1272/2008 (CLP) and Commission Regulation EU No. 453/2010

Name of the product ZENICOLOR 5

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10.4	Conditions to avoid Stable under normal conditions. Keep away from de	irect sunlight and heat sources. Protect from freezing.
10.5	Incompatible materials Strong oxidative compounds, acids and alkalis.	
10.6	combustion and high-temp thermolysis may produc	res. If fire is involved: upon water evaporation - incomplete ee toxic, irritating and flammable decomposition products (such as and other products of organic compounds decomposition, sulphur
SECT	TION 11: TOXICOLOGICAL INFORMATION	
11.1	Information on toxicological effects	
<i>a</i>)	Acute toxicity	
	No toxicology data for the mixture.	
	Compounds:	
	propylene glycol	
	LD50, oral toxicity, rat:	> 22000 mg.kg ⁻¹ bw
	LC50,dermal toxicity, rabbit:	$> 2000 \text{ mg.kg}^{-1} \text{ bw}$
	LC50, inhalation toxicity, rabbit:	> 317 mg/l (2 h of exposure)
	glycerine LD50, oral toxicity, rat:	12600 mg.kg ⁻¹ bw
	sodium laureth sulphate LD50, oral toxicity, rat: LC50,dermal toxicity, rabbit:	$>= 2000 \text{ mg.kg}^{-1} \text{ bw}$ $>= 2000 \text{ mg.kg}^{-1} \text{ bw}$
<i>b</i>)	Irritation	
		re not met. The mixture has no irritating properties requiring hay cause removal of natural fat from the skin resulting in dermatitis irritation.
c)	Corrosivity	
	Based on available data, the classification criteria a	re not met.
d)	Sensitization Based on available data, the classification criteria a	re not met. Compounds have no sensitization potential.
<i>e</i>)	Repeated Dose Toxicity Based on available data, the classification criteria a repeated exposure.	re not met. Not expected to cause organ damage from prolonged or
	Compounds:	
	propylene glycol NOAEL, oral toxicity, rat: inhalation toxicity, rat: 160 mg.m ⁻³	1700 mg.kg ⁻¹ bw LOAEC,
f)	Carcinogenicity	

Based on available data, the classification criteria are not met. Compounds have no potential for carcinogenicity.

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g) | Mutagenicity

Based on available data, the classification criteria are not met. Compounds have no potential for mutagenicity.

h) Toxicity for reproduction

Based on available data, the classification criteria are not met. Compounds have no potential for reproductive toxicity.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Based on composition, no adverse effects in the environment are expected for the mixture; therefore the mixture is not considered as dangerous for the environment.

Compounds:

propylene glycol

Short-term toxicity to fish freshwater: Oncorhynchus mykiss (rainbow troat) LC50=

40613 mg/L (96h of exposure)

Short-term toxicity to aquatic invertebrates

freshwater: *Ceriodaphnia dubia* LC50/EC50 = 18340 mg/L (48 h of exposure) marine water: *Americamysis bahia* LC50/EC50= 18800 mg/L((96 h of exposure)

Algae and aquatic plants

freshwater: *Pseudokirchnerella subcapitata* EC50= 19000 mg/L(96 h of exposure) marine water: *Skeletonema costatum* EC (50)= 19 100 mg/L (96 h of exposure)

Toxicity to bacteria
Pseudomonas putida

NOEC= 20000 mg/L (18 h of exposure)

Long-term toxicity to fish

Remark: Not expected to exhibit chronic toxicity to fish as the substance is readily biodegradable.

Long-term toxicity to aquatic invertebrates

Ceriodaphnia sp. NOEC =13 020 mg/L (7 days of exposure)

sodium laureth sulphate

Short-term toxicity to aquatic invertebrates

Water flea ($Ceriodaphnia\ dubia$): EC50 = 2.33 - 4.81 mg/l 48 hours

12.2 Persistence and degradability

Information for the mixture not available. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at-the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

No data for the mixture. Based on composition, bioaccumulation is not expected.

12.4 Mobility in soil

No data for the mixture. Soluble in water (unlimited).

12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII; the substances in the mixture are not included in the Candidate List of SVHC

12.6 Other adverse effects

Not known.

according to Regulation EC No. 1907/2006 (REACH), Regulation EC No. 1272/2008 (CLP) and Commission Regulation EU No. 453/2010

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SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

It is recommended to dispose all rests in authorized dangerous waste facility. Disposal has to comply all requirements of the Act No. 223/2001 Coll. (SK) on wastes.

Substance or mixture disposal methods:

Dispose in accordance with the valid waste legislation. Do not dispose as a common household waste. Dispose in a certified hazardous waste facility. According to the European Waste Catalogue waste codes are not specific for product, but for its use. Therefore, appropriate waste code should assign final user according to his specific use.

Proposed waste classification, based on common use:

07 06 wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics

Waste type name: wastes not otherwise specified

Waste catalog code: 07 06 99 Waste category: O (not hazardous)

Contaminated packages disposal methods:

Dispose in accordance with the valid waste legislation. Empty packages wash with water and recycle.

Proposed waste classification, based on common use:

15 01 packaging (including separately collected municipal packaging waste)

Waste type name: paper and card board packaging / plastic packaging

Waste catalog code for empty package: 15 01 01 / 15 01 02

Waste category: O (not hazardous)

SECTION 14: TRANSPORT INFORMATION

.1	UN Number: -	TERIE PRIM	A SI ECHIPAN	4 E NT E
1.2	UN proper shipping nar	me		
	Road transport ADR	Rail transport RID	International maritime transport IMDG	Air transport ICAO/IATA
	-	-	-	-
.3	Transport hazard class(es)		
	Road transport ADR	Rail transport RID	International maritime transport IMDG	Air transport ICAO/IATA
	-	-	-	-
	Classification code			
	-	-	-	-
	Hazard identification nu	ımber (Kemler)		
	-	-	-	-
	Labels			
	-	-	-	-

HOLDING

according to Regulation EC No. 1907/2006 (REACH), Regulation EC No. 1272/2008 (CLP) and Commission Regulation EU No. 453/2010

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	Road transport ADR	Rail transport RID	International maritime transport IMDG	Air transport ICAO/IATA
	-	-	-	-
14.5	Environmental hazards: no			
14.6	Special precautions for user	: not required		
14.7	Transport in bulk according	g to Annex II of MARPOL 73	78 and the IBC Code: not tra	nsported

SECTION 15: REGULATORY INFORMATION

15.1

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

Relevant legislation European Union:

- Act No 67/2010 on conditions applicable to the placing on the market of chemical substances and chemical mixtures, amending certain acts (Chemicals Act)
- Regulation (EC) No 1907/2006 of the European Parliament and of the , concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Regulation EC No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of

substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

- Commission Regulation(ES) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council
 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
- Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations
- Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances
- 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
- Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC
- Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC

Relevant local legislation:

- Zákon č. 67/2010 Z.z., o podmienkach uvedenia chemických látok a chemických zmesí na trh a o zmene a doplnení niektorých zákonov (chemický zákon)
- Výnos MH SR 3/2010, ktorým sa ustanovujú podrobnosti o všeobecných požiadavkách na klasifikáciu, označovanie a balenie nebezpečných látok a
 zmesí
- Zákon č. 124/2006 Z. z. o bezpečnosti a ochrane zdravia pri práci a o zmene a doplnení niektorých zákonov v znení zákona č. 309/2007 Z. z.. zákona č. 140/2008 Z. z., zákona č. 132/2010 Z. z. a zákona č. 136/2010 Z. z..
- Zákon NR SR č. 355/2007 Z.z., o ochrane, podpore a rozvoji verejného zdravia a o zmene a doplnení niektorých zákonov, v znení neskorších predpisov
- Nariadenie vlády SR 471/2011 Z.z., ktorým sa mení nariadenie vlády Slovenskej republiky č. 355/2006 Z. z. o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci, Príloha č.1
- Zákon č. 223/2001 o odpadoch a o zmene a doplnení niektorých zákonov z 15. mája 2001, v znení neskorších predpisov (773/2004 Z.z.).
- Vyhláška Ministerstva životného prostredia SR č. 284/2001 Z.z. z 11. júna 2001, ktorou sa ustanovuje Katalóg odpadov.
- Výnos MH SR č. 3/2010, ktorým sa ustanovujú podrobnosti o všeobecných požiadavkách na klasifikáciu, označovanie a balenie nebezpečných látok a zmesí
- Vyhláška MV SR č. 96/2004 Z.z., ktorou sa ustanovujú zásady protipožiarnej bezpečnosti pri manipulácii a skladovaní horľavých kvapalín, ťažkých vykurovacích olejov a rastlinných a živočíšnych tukov a olejov

15.2 Chemical safety assessment

Chemical safety assessment not carried yet

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Changes made to	the previous version of the safety data sheet
_	rst edition - version 1.0
Key or legend to	abbreviations and acronyms used in the safety data sheet
Xi	Irritating
Xn	Harmful
Eye Irrit. 2	Serious eye damage/eye irritation, category 2
Skin Irrit. 2	Skin Corrosion/Irritation; category 2
Acute Tox. 4	Acute toxicity; category 4
Exp. lim.	Exposure limit
PEL	Permissible exposure limit (average - Czech republic)
NPK-P	The highest permissible concentration (peak - Czech republic)
OEL	Occupational exposure limit
РВТ	Substances persistent, bioacumulative and toxic
vPvB	Substances very persistent and very bioacumulative
VOC	Volatile organic compound
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Substances persistent, bioacumulative and toxic
LD50 / LC50	Lethal dose / concentration affecting 50% of tested population
LOAEL	Lowest Observed Adverse Effect Level
LOEL	Lowest Observed Effect Level
w/w	Weight by weight
ACGIH	American Conference of Governmental Industrial Hygienists
ADR	Accord européen relatif autransport internationaldes marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID	Règlement concernant le transport International ferroviaire de marchandises Dangereuses (=
IATA	Regulation concerning the International Carriage of Dangerous Goods by Rail) International Air Transport Association
IMDG-code	International Maritime Code for Dangerous Goods
MARPOL	International Convention for the Prevention of Marine Pollution from Ships
SVHC	Substances of Very High Concern

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VOC Volatile organic compounds

vPvB very Persistent, very Bioaccumulative

WEL-TWA Workplace Exposure Limit - Long-term exposure limit (8-hour TWA = time weighted average)

WEL-STEL Workplace Exposure Limit - Short-term exposure limit (15-minute reference period)

ACGIH American Conference of Governmental Industrial Hygienists

BCF Bioconcentration factor

BOD Biochemical oxygen demand

c) Key literature references and sources for data

Original Material Safety Data Sheets of all compounds.

d) Methods of evaluating information used for the purpose of classification

The mixture was classified by expert judgment and conventional calculations methods in accordance with the Direction 1999/45/EC.

e) Full wording of used Risk Phrases (R-phrases) and Hazard Statements (H-phrases)

R22 Harmful if swallowed R36/38 Irritating to eyes and skin

H302 Harmful if swallowed. H315 Causes skin irritation.

H319 Causes serious eye irritation.

f) Advice on any training appropriate for workers

Not relevant for consumer. Before professional handling, storing or using the present substance for the first time, employees must be informed - common training for handling chemicals, occupational safety training.

g) Other information

Material Safety Data Sheet is compiled in accordance with the Act No. 67/2010 Coll. and Regulation EC 1907/2006 and contains information on safety use, occupational health protection, and environmental protection. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. This particular information apply on the product as supplied and may not be valid in mixtures with other substances. If used for other purposes as identified in this MSDS, the distributor is not liable for any damage.

The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfill his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

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