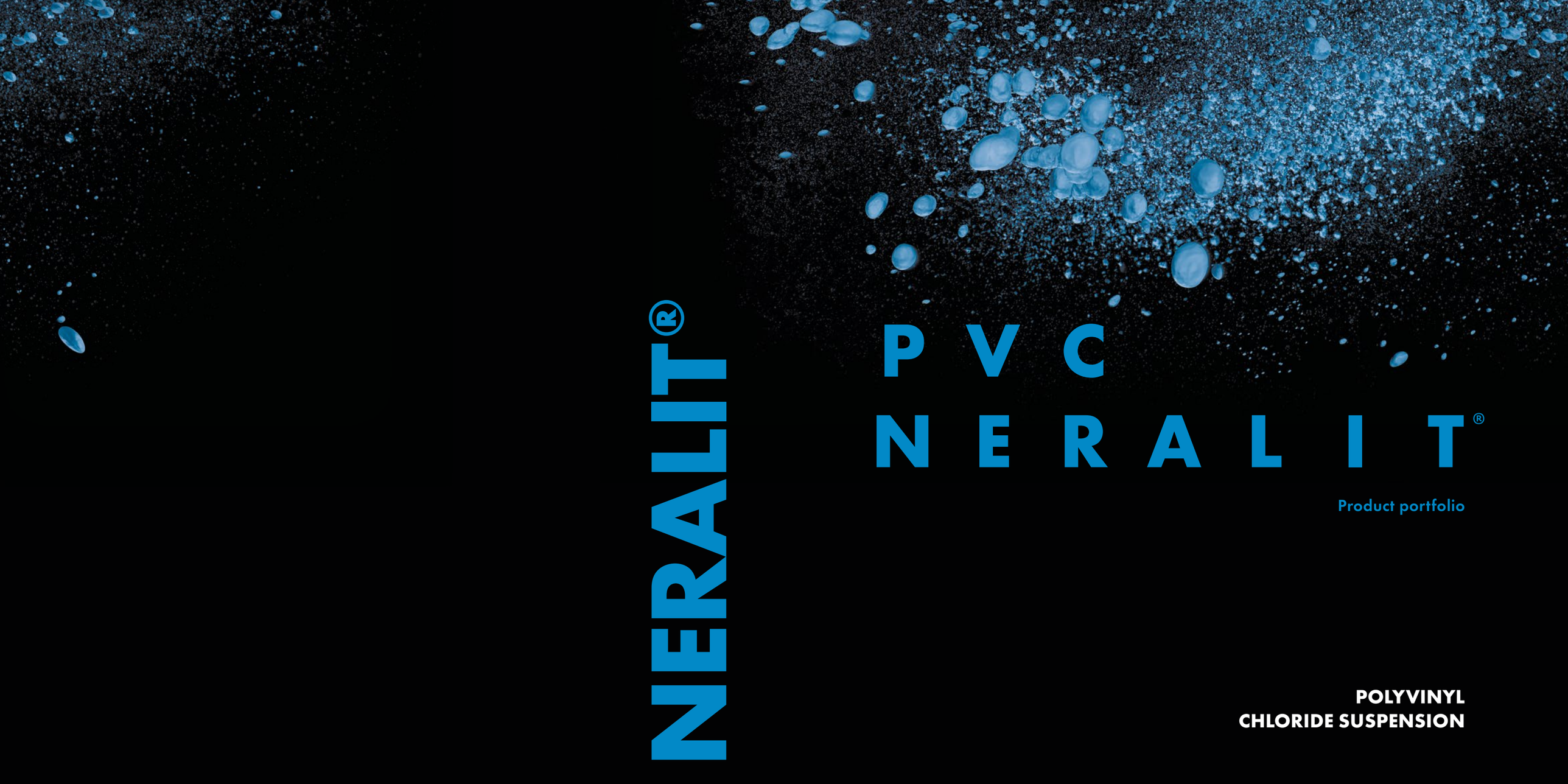

NERALIT®

PVC NERALIT®

Product portfolio

POLYVINYL CHLORIDE SUSPENSION

NERALIT®
SAFETY DATA SHEET

SECTION 1: Substance/mixture types, applications and suppliers

1.1	**PRODUCT IDENTIFIER**		
	Trade name:	Neralit ® type 581 Neralit ® type 601 Neralit ® type 652 Neralit ® type 682 Neralit ® type 702	
	International chemical name / CAS Number	POLYVINYL CHLORIDE SUSPENSION (PVC-S) / 9002-86-2	
	Identification number:		
	Registration number:	Registration according to the Directive of the European Parliament and of the Council (EC) No. 1907/2006 (see Article 2 (9)(6)(3) of this Directive) is not required.	
1.2	**SUITABLE APPLICATIONS OF THE SUBSTANCE OR MIXTURE AND NON-RECOMMENDED APPLICATIONS**		
	Applications	Industrial applications of the materials	
		Neralit ® 581 and Neralit ® 601 – low-molecular types of PVC suspension with high loose weight and low grain porosity, designed for the production of hard (non-plasticized) PVC products. Neralit ® 601 is suitable for the production of transparent products. Neralit ® 652 – medium-molecular type of PVC suspension with porous grain texture, designed for the production of both plasticized and non-plasticized products. Neralit ® 682 - medium-molecular type of PVC suspension, designed for the production of hard (non-plasticized) PVC products with stringent requirements for good mechanical properties. It is especially suitable for the production of pressure pipes and window profiles. Neralit ® 702 – high-molecular type of PVC suspension with extremely porous grain texture, designed for the production of plasticized PVC products. Its main applications are in the production of cables and conductors. It is suitable for film coating.	
1.3	**DETAILS OF THE SAFETY DATA SHEET SUPPLIER**		
	Manufacturer:	SPOLANA s.r.o.	
	Registered office:	SPOLANA s.r.o., ul.Práce 657, 277 11 Neratovice	
	Company ID:	451 47 787	
	Telephone:	Tel: +420 315 662 555	Fax: +420 315 666 633
	Contact person:	Tel: +420 315 662 555	Mail: reach@spolana.cz
1.4	**EMERGENCY TELEPHONE NUMBER**		
	Klinika pracovního lékařství VFN a 1. LF UK Toxikologické informační středisko Na Bojišti 1, 120 00, Praha 2	**Tel:** +420 224 919 293, +420 224 915 402, **E-mail:**tis@vfn.cz Information only for health risks – acute poisoning of humans and animals	

SECTION 2: Hazards

	Substance classification:	The substance does not indicate any dangerous properties in accordance with the wording of Act No. 350/2011 Coll.
	Dangerous health effects:	The melt may cause severe burns.
	Dangerous environmental effects:	Not available.
2.1	**SUBSTANCE OR MIXTURE CLASSIFICATION**	
	Classification according to (EC) 1272/2008:	Not classified
2.2	**LABELS**	
	Hazard pictogram(s):	None
	Signal word:	
	Hazard statement(s):	
	Precautionary statement(s):	P260 Do not inhale dust/fume/gas/mist/vapours/spray.
2.3	**OTHER HAZARDS**	

SECTION 3: Composition/information about ingredients

3.1	**SUBSTANCES**				
	Major component identifier:	Name:	polyvinyl chloride suspension		
		Identification	Index number	CAS number	EC number
		number:		9002-86-2	

SECTION 4: First aid measures

4.1	**DESCRIPTION OF FIRST AID MEASURES**	
	General first aid principles: **In life threatening situations, administering resuscitation resuscitation is a priority** **If the victim is not breathing** – administer artificial respiration immediately **Heart failure** – administer cardiac massage immediately **Unconsciousness** – put the victim into a stable position on his/her side	

4.2	MOST SIGNIFICANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED	
	Inhalation:	Stop exposure immediately, take the victim out into fresh air (watch out for contaminated clothing). Keep the victim warm. Seek medical treatment.
	Skin contact:	Remove contaminated clothing immediately. Rinse affected areas with a large amount of water, ideally lukewarm. If the skin is not damaged (injured), soap may also be used. Seek medical treatment.
	Eye contact:	Immediately rinse the eyes with a stream of running water. Open the eyelids with your fingers (even forcibly), remove any contact lenses, and rinse the eyes for at least 10 minutes. Seek medical treatment.
	Ingestion:	Do not induce vomiting. If possible, administer medicinal charcoal. Seek medical treatment.
	Staining with melt:	8-hour limit PEL [mg/m^3]
4.3	INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT REQUIRED	

SECTION 5: Firefighting measures

5.1	EXTINGUISHING MEDIA	
	Suitable extinguishing media	Small amounts: water, dry powder and foam extinguishers, or sand or soil. Large amounts: powder, heavy and medium foam or a water stream in the form of fine mist. Fire fighting: Remove the material from the fire area if can be done safely. Use only suitable extinguishing means. Stand on the windward side of the fire and away from low lying areas.
	Unsuitable extinguishing media:	Pressurized water, snow fire extinguishers.
5.2	SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE	
	Do not inhale combustion products. Thermal decomposition may produce toxic products, especially hydrogen chloride and carbon oxides (or other toxic gases such as phosgene, nitrogen compounds, etc.).	
5.3	RECOMMENDATIONS FOR FIREFIGHTERS	
	Use isolation respirators to protect your airways during a fire fighting intervention.	

SECTION 6: Accidental release measures

6.1	PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES
	Do not eat, drink or smoke while working with Neralit or after finishing work until you have properly washed yourself with soap and hot water.

6.2	ENVIRONMENTAL PRECAUTIONS
	Clean the contaminated area as soon as possible
6.3	METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP
	Collect the leaked material in a suitable container for further processing or liquidation.
6.4	REFERENCE TO OTHER SECTIONS

SECTION 7: Handling and storage

7.1	PRECAUTIONS FOR SAFE HANDLING
	Do not eat, drink or smoke while working with Neralit or after finishing work until you have properly washed yourself with soap and hot water. If spilt onto firm, surfaces ground, the product may make you slip.
7.2	CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES
	Store and handle the product in accordance with all common regulations and standards applicable to alkalis. Store PVC in dry, dust-free areas. Protect the product from direct sunlight. Store away from organic solvents of all kinds and from coming into contact with chemicals which are not guaranteed to be chemically safe. Observe the storage conditions for plastic products – protection against electrostatic charge (ČSN 64 0090).
7.3	SPECIFIC END USE(S)
	All types of PVC are supplied as clean white powder in tankers or packaged in bags or big bags.

SECTION 8: Exposure controls/personal protection

8.1	CONTROL PARAMETERS				
	The national occupational exposure limit values according to Government decree No. 361/2007 Coll.				
	Name of substance (component(s)):	CAS		Short-term limit NPK-P [mg/m3]	Note
	PVC powder			5	
	PEL- admissible exposure limit of the chemical substance in the working environment NPK-P- maximum admissible exposure limit of the chemical substance in the working environment				
	Occupational exposure limit values according to Directives 39/2000/EC and 15/2006/EC				
	Name of substance (component(s)):	CAS	8-hour limit TWA[mg/m3]	Short-term limit STEL[mg/m3]	Note
	8-hour limit – measured or calculated limit related to an 8-hour reference period as a time-weighted average. Short-term limit – limit value corresponding to 15 minutes. If exceeded, exposure should be avoided.				

Recommended monitoring procedures:
Obtain a working environment sample using sampling head to further determine dust levels and then evaluate by balancing. Determine dust levels with a dust counter.

The national biological limit values:

DNEL	Not available.
PNEC	Not available.

8.2 EXPOSURE CONTROLS

Local ventilation or the entire ventilation system must observe the relevant PVC dust limits.

Personal protective equipment:

Respiratory protection:	Under conditions of intense or repeated exposure, an appropriate respirator must be worn to protect the airways.
Eye protection:	Always wear goggles or a face shield at work where there is a risk of contact with the eyes.

Hand protection:

Protective gloves with the following specifications:

Work activity	Glove material	Minimum layer thickness	Penetration time (minutes)
Common work activities with a possible risk of contamination	Natural latex (KCL-395,403)	1 mm	> 480 min
Use during the elimination of leaks or during accidents	Nitrile (KCL-732)	0.4 mm	> 480 min

Protective gloves must comply with the conditions specified by the EU Directive 89/686/EHS and standard EN 374. The table presents the laboratory data of the company KCL (catalogue values).
The values apply to the above-specified types of protective gloves. If different, equivalent types of gloves must be used, and the same data must be obtained from the supplier.

Skin protection: Always wear suitable work clothes to prevent lasting contact with the substance.

Environmental exposure control:
Do not discharge into the sewer system, water streams or soil.

SECTION 9: Physical and chemical properties

9.1 INFORMATION ABOUT THE PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White powder
Odour:	Odourless
Odour threshold:	
pH (at 20°C):	Not applicable
Melting point/freezing point (°C):	Not applicable
Initial boiling point and boiling range (°C):	Not applicable
Flash point (°C):	345–530 °C
Evaporation rate:	Does not evaporate
Flammability (solid, gas):	Difficult to ignite
Upper/lower flammability or explosive limits — upper (% vol.):	Not applicable
lower (% vol.):	Not applicable
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Density:	1.32-1.36 g/cm³
Solubility:	Insoluble in water
Partition coefficient n-octanol/water:	Not applicable
Auto-ignition temperature:	Self ignition does not occur.
Decomposition temperature:	140–150 °C
Viscosity:	Not applicable
Explosive properties:	Only at high ignition energies
Oxidising properties:	Not applicable
Stability in organic solvents and identity of relevant degradation products	Soluble in cyclohexanone, methylcyclohexanone, dimethylformamide, nitrobenzene, tetrahydrofuran, dipropyl ketone, methyl amyl ketone, methyl isobutyl ketone, dioxane, methyl ethyl ketone, dichlormethane, chlorbenzene, dichloroethylene
Dissociation constant	Not applicable

9.2 Other information

Bulk density (accordig to type): 0.45–0.63 g/cm³
soluble: cyclohexanone, methylcyclohexanone, dimethylformamide, nitrobenzene, tetrahydrofuran,
dipropyl ketone, methyl amyl ketone, methyl isobutyl ketone, dioxane, methyl ethyl ketone, dichlormethane,
chlorbenzene, dichloroethylene resistant to nonoxigenic acids and alkalis, alcohols and aliphatic hydrocarbons

SECTION 10: Stability and reactivity

10.1 REACTIVITY

Low reactivity

10.2 CHEMICAL STABILITY

The product is stable under standard conditions.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Strong oxidation agents: risk of fire and explosion.
Oxygenic acids: decomposition of polyvinyl chloride.

10.4 CONDITIONS TO AVOID

Unsuitable storage conditions: prevent direct contact with flames, sparks and other potential sources of ignition.
Prevent direct contact with substances that combine into dangerous chemical reactions. No dangerous degradation takes place under standard temperature and pressure or common technological conditions of processing.

10.5 INCOMPATIBLE MATERIALS

oxidation agents, oxygenic acids

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

PVC has a typical thermoplastic character. At temperatures above 80 °C, PVC it begins to soften, and when under pressure and at temperatures of 145–170 °C, it begins to flow. Prolonged heating to 140–150 °C turns the product brown and splits off hydrogen chloride. Thermal decomposition may be accompanied with the creation of other toxic by-products.

SECTION 11: Toxicological information

11.1 INFORMATION ABOUT TOXICOLOGICAL EFFECTS

PVC is a non-toxic material that causes mild, mainly mechanical irritation of the mucosa and sensitive skin. PVC contains a maximum of 1 mg.kg-1 (ppm) of vinyl chloride monomer. Information about significant adverse effects on humans as a result of long exposure is not available.

a) **Acute toxicity**
Not known

b) **Skin corrosion/irritation**
Not known

c) **Serious eye damage/irritation**
Not known

d) **Respiratory or skin sensitisation**
Not known

e) **Germ cell mutagenicity**
Not known

f) **Carcinogenicity**
Not known

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Not known

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Not known

d) **Respiratory or skin sensitisation**
Not known

e) **Germ cell mutagenicity**
Not known

f) **Carcinogenicity**
Not known

g) **Reproductive toxicity**
Not known

h) **Specific target organ toxicity (STOT)– single exposure**
Not known

i) **Specific target organ toxicity (STOT)– repeated exposure**
Not known

j) **Aspiration hazard**
Not known

SECTION 12: Ecological information

12.1 TOXICITY

Not classified as a CMR and PBT or vPvB substance and does not meet the classification criteria for environmental hazards.

Fish
Not known

Algae
Not known

Daphnia
Not known

Bacteria
Not known

12.2 PERSISTENCE AND DEGRADABILITY

Not biodegradable.

12.3	**BIOACCUMULATIVE POTENTIAL**
	Polyvinyl chloride has no potential to bioaccumulate.
12.4	**MOBILITY IN SOIL**
	Not applicable.
12.5	**RESULTS OF PBT AND VPVB ASSESSMENT**
	Not classified.
12.6	**OTHER ADVERSE EFFECTS**
	Other ecotoxicological advice: Do not release untreated into natural waters.

SECTION 13: Disposal considerations – in accordance with national directives

13.1	**WASTE TREATMENT METHODS**
	a) Recommended disposal methods: Observe all valid waste-related laws and regulations. Residual Neralit must be stored in an S-OO dumpsite.
	b) Recommended disposal methods for contaminated packaging.
	c) Empty packaging units can be recycled after thorough emptying.
	d) Waste regulations Czech Republic: Waste Act No. 185/2001 Coll., as annotated, waste catalogue (decree No. 93/2016 Sb.) as annotated. European Union: Directive of the European Parliament and of the Council No. 2006/12/ES on waste.

SECTION 14: Transport information

14.1	**UN NUMBER**	
14.2	**UN CORRECT SHIPPING NAME**	
	ADR	Polyvinyl chloride
	RID	Polyvinyl chloride
	IMDG:	Polyvinyl chloride
	ICAO/IATA:	Polyvinyl chloride

14.3	**TRANSPORT HAZARD CLASS(S)**			
	ADR	RID	IMDG:	ICAO/IATA:
14.3	**TRANSPORT HAZARD CLASS(S)**			
	ADR	RID	IMDG:	ICAO/IATA:
	CLASSIFICATION			
	ADR	RID		
14.4	**PACKAGING GROUP**			
	ADR	RID	IMDG:	ICAO/IATA:
	ADR			
	80			
	LABELS			
	ADR	RID	IMDG:	ICAO/IATA:
	NOTE			
	ADR	RID	IMDG:	ICAO/IATA:
			Marine pollutant: EmS:	PAO: CAO:
14.5	**ENVIRONMENTAL HAZARDS**			
	No			
14.6	**SPECIAL PRECAUTIONS FOR SERS**			
	No			
14.7	**TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE**			
	No			

SECTION 15: Regulatory information

15.1	**Safety, health and environmental regulations/legislation specific for the substance or mixture**
	Regulation of the European Parliament and of the Council (EC) No. 1907/2006 REACH Regulation (EC) 1272/2008 on classification, labelling and packaging (CLP) of substances and mixtures
15.2	**Chemical safety assessment**
	A chemical safety assessment was conducted.

SECTION 16: Other information

a) Amendments in case of a revised safety data sheet
New safety data sheet according to Annex II Regulation (EC) 1907/2006 amended by Reg. (EC) 453/2010

b) A key or legend to abbreviations and acronyms
PBT : Persistent, bioaccumulative and toxic.
vPvB : Very persistent and very bioaccumulative.
Skin Corr. 1A Skin corrosion/irritation, Hazard Category 1A

c) Key literature references and sources for data
Regulation of the European Parliament and of the Council (EC) No.1907/2006
Registration documentation according to Direction (EC) 1907/2006 REACH
Appendix I, IV, VI a VII from Direction (EC) 1272/2008 CLP as annotated

Act No. 350/2011 Coll. on chemical substances and chemical preparations and on changes to certain laws, as annotated
Decree No. 232/2004 Coll., which implements the provisions of the Act on chemical substances and chemical preparations and on changes to certain laws with regard to the classification, packaging and marking of dangerous chemical substances and chemical preparations, as annotated
Act No. 258/2000 Coll. on the protection of public health and on changes to certain related laws, as annotated
Governmental decree No. 361/2007 Coll., which stipulates the conditions of protecting employee health at work

d) **List of relevant phrases, hazard statements, safety phrases and precautionary statements**

P-phrases	P260 Do not breathe dust/fume/gas/mist/vapours/spray.

e) Appropriate training for workers
People handling the product must be informed about the risk of hazards to life and health and about the requirements for the protection of health and the environment (see the respective provisions of the Labour Code)

f) More information
The Safety Data Sheet has been prepared in accordance with the Regulation of the European Parliament and of the Council Regulation (EC) no. 1907/2006 (article 32). The Safety Data Sheet contains important information about ensuring safety and health at work and for environmental protection. This information corresponds to the current state of knowledge and experience and complies with the applicable laws and regulations. The information cannot be considered a guarantee of suitability for a specific application. Compliance with applicable local laws is in the responsibility of the buyer.
According to Article 35 of the European Parliament and of the Council, Regulation (EC) no. 1907/2006 requires each employer to provide workers and their representatives access to the information about MSDS substances and the preparations which the worker uses or whose effects they may be exposed to during their work.