

# SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

# polyvinylchloride

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : polyvinylchloride

**Registration number REACH** : Exempted from registration under REACH (Regulation (EC) No 1907/2006, article 2 (9), polymers)

Product type REACH : Polymer : 9002-86-2 CAS number : (C2H3Cl)n **Formula** 

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

#### 1.2.1 Relevant identified uses

Synthetic materials: raw material

Synthetic material

#### 1.2.2 Uses advised against

No uses advised against known

#### 1.3. Details of the supplier of the safety data sheet

#### Supplier of the safety data sheet

Vynova Belgium NV Heilig Hartlaan 21 B-3980 Tessenderlo **☎**+32 13 61 23 00

sds.responsible@vynova-group.com

#### 1.4. Emergency telephone number

24h/24h:

+32 14 58 45 45 (BIG)

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

#### 2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

### 2.3. Other hazards

Fine dust is explosive with air Heated product causes burns

# SECTION 3: Composition/information on ingredients

## 3.1. Substances

Name	CAS No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and
REACH Registration No	EC No					ATE
polyvinylchloride	9002-86-2	C>99 %		(2)	Polymer	

<sup>(2)</sup> Substance with a Community workplace exposure limit

#### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

#### General:

If you feel unwell, consult a doctor/medical service.

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

#### After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water.

#### After eye contact:

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Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

#### After ingestion

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

#### 4.2.1 Acute symptoms

#### After inhalation:

ON HEATING: Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

# After skin contact: IF MELTING: Burns.

**After eye contact:** Mechanical irritation. ON HEATING: Irritation of the eye tissue.

#### After ingestion: No effects known.

#### 4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

#### 5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Class A foam extinguisher, Water (quick-acting extinguisher, reel).

Major fire: Water, Class A foam.

#### 5.1.2 Unsuitable extinguishing media:

Small fire: Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

#### 5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, carbon monoxide - carbon dioxide).

#### 5.3. Advice for firefighters

#### 5.3.1 Instructions:

Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-contained breathing apparatus (EN 136 + EN 137). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

## SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Prevent dust cloud formation, e.g. by wetting. No naked flames.

### **6.1.1** Protective equipment for non-emergency personnel

See section 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Dust cloud production: self-contained breathing apparatus (EN 136 + EN 137). Suitable protective clothing

See section 8.2

### 6.2. Environmental precautions

Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

## 6.3. Methods and material for containment and cleaning up

Stop dust cloud by humidifying. Scoop solid spill into closing containers. Powdered: do not use compressed air for pumping over spills. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

#### 6.4. Reference to other sections

See section 13.

# SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 7.1. Precautions for safe handling

Avoid raising dust. Take precautions against electrostatic charges. Keep away from naked flames/heat. In finely divided state: use spark-/ explosionproof appliances. Finely divided: keep away from ignition sources/sparks. Observe strict hygiene. Keep container tightly closed.

### 7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

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Meet the legal requirements. Store in a cool area. Store in a dry area. Keep container in a well-ventilated place. Provide the tank with earthing.

#### 7.2.2 Keep away from:

Heat sources, ignition sources, oxidizing agents, halogens.

#### 7.2.3 Suitable packaging material:

No data available

#### 7.2.4 Non suitable packaging material:

No data available

#### 7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

#### 8.1.1 Occupational exposure

#### a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### Belgium

Chlorure de polyvinyle (fraction alvéolaire)	Time-weighted average exposure limit 8 h	1 mg/m³
JK		
Polyvinyl chloride inhalable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m³
Polyvinyl chloride respirable dust	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m³

Polyvinyl chloride	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	1 mg/m³ (R)

<sup>(</sup>R): Respirable fraction

#### b) National biological limit values

If limit values are applicable and available these will be listed below.

## 8.1.2 Sampling methods

If applicable and available it will be listed below.

#### 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

#### 8.1.4 Threshold values

If applicable and available it will be listed below.

#### 8.1.5 Control banding

If applicable and available it will be listed below.

## 8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 8.2.1 Appropriate engineering controls

Avoid raising dust. Take precautions against electrostatic charges. Keep away from naked flames/heat. In finely divided state: use spark-/ explosion proof appliances. Finely divided: keep away from ignition sources/sparks. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

## 8.2.2 Individual protection measures, such as personal protective equipment

Observe strict hygiene. Do not eat, drink or smoke during work.

### a) Respiratory protection:

Dust production: dust mask with filter type P2.

#### b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
neoprene (chloroprene rubber)				Good resistance
nitrile rubber	> 480 minutes	0.11 mm	Class 6	Good resistance
PVC				Good resistance

## c) Eye protection:

Safety glasses (EN 166). In case of dust production: protective goggles (EN 166).

#### d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

#### 8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

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# SECTION 9: Physical and chemical properties

# 9.1. Information on basic physical and chemical properties

Physical form	Solid					
	Powder					
	Grains					
Odour	Odourless					
Odour threshold	No data available in the literature					
Colour	White					
Particle size	No data available in the literature					
Explosion limits	No data available in the literature					
Flammability	Not classified as flammable					
Log Kow	Not quantifiable					
Dynamic viscosity	Not applicable (solid)					
Kinematic viscosity	Not applicable (solid)					
Melting point	170 °C - 200 °C					
Boiling point	No data available in the literature					
Relative vapour density	Not applicable (solid)					
Vapour pressure	No data available in the literature					
Solubility	Water ; insoluble					
Relative density	1.4 ; 25 °C					
Absolute density	1400 kg/m³					
Decomposition temperature	180 °C					
Auto-ignition temperature	600 °C					
Flash point	Not applicable (solid)					
рН	No data available in the literature					

#### 9.2. Other information

Minimum ignition energy	> 1000 mJ
Softening point	70 °C - 80 °C
Evaporation rate	Not applicable (solid)

# SECTION 10: Stability and reactivity

## 10.1. Reactivity

Heating increases the fire hazard.

## 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No data available.

#### 10.4. Conditions to avoid

#### **Precautionary measures**

Avoid raising dust. Take precautions against electrostatic charges. Keep away from naked flames/heat. In finely divided state: use spark-/ explosionproof appliances. Finely divided: keep away from ignition sources/sparks.

# 10.5. Incompatible materials

Oxidizing agents, halogens.

#### 10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, carbon monoxide - carbon dioxide).

# SECTION 11: Toxicological information

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

### 11.1.1 Test results

#### Acute toxicity

polyvinylchloride

<u> </u>	yviiiyiciiioriac	myemorae						
	Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
							determination	
	Oral	LD50		> 2000 mg/kg		Rat	Literature study	
	Dermal	LD50		> 2000 mg/kg		Rabbit	Literature study	

#### Conclusion

Not classified for acute toxicity

## Corrosion/irritation

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#### polyvinylchloride

No (test)data available

#### Conclusion

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

#### Respiratory or skin sensitisation

#### polyvinylchloride

No (test)data available

#### Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

#### Specific target organ toxicity

## polyvinylchloride

No (test)data available

#### Conclusion

Not classified for subchronic toxicity

#### Mutagenicity (in vitro)

#### polyvinylchloride

No (test)data available

#### Mutagenicity (in vivo)

#### <u>polyvinylchloride</u>

No (test)data available

#### Conclusion

Not classified for mutagenic or genotoxic toxicity

#### Carcinogenicity

#### polyvinylchloride

No (test)data available

#### Conclusion

Not classified for carcinogenicity

#### Reproductive toxicity

## polyvinylchloride

No (test)data available

#### Conclusion

Not classified for reprotoxic or developmental toxicity

### **Toxicity other effects**

## polyvinylchloride

No (test)data available

## Chronic effects from short and long-term exposure

#### polyvinylchloride

No effects known.

## 11.2. Information on other hazards

No evidence of endocrine disrupting properties

# SECTION 12: Ecological information

# 12.1. Toxicity

#### polyvinylchloride

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		≥ 100 mg/l	96 h	Pisces			Literature study

#### Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

#### 12.2. Persistence and degradability

#### Water

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Not readily biodegradable in water

#### 12.3. Bioaccumulative potential

polyvinylchloride

#### Log Kow

Method	Remark	Value	Temperature	Value determination
	Not quantifiable			

#### Conclusion

Not bioaccumulative

#### 12.4. Mobility in soil

No (test)data on mobility of the substance available

#### 12.5. Results of PBT and vPvB assessment

Substance does not meet the criteria of PBT, nor the criteria of vPvB according to Annex XIII of Regulation (EC) No 1907/2006, so is neither PBT nor vPvB.

#### 12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

#### 12.7. Other adverse effects

polyvinylchloride

#### Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

#### Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

## SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 13.1. Waste treatment methods

#### 13.1.1 Provisions relating to waste

#### **European Union**

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

07 02 13 (wastes from the MFSU of plastics, synthetic rubber and man-made fibres: waste plastic). Depending on branch of industry and production process, also other waste codes may be applicable.

#### 13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

#### 13.1.3 Packaging/Container

No data available

# SECTION 14: Transport information

## Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

Jad (ADR), Raii (RiD), iniand waterways (ADN), Se	a (IIVIDG/IIVISBC), AII (ICAO-II/IATA-DGK)	
14.1. UN number	Non-colling	
Transport	Not subject	
14.2. UN proper shipping name		
14.3. Transport hazard class(es)		
Hazard identification number		
Class		
Classification code		
14.4. Packing group		
Packing group		
Labels		
14.5. Environmental hazards		
Environmentally hazardous substance mark	no	
14.6. Special precautions for user		
Special provisions		
Limited quantities		
14.7. Maritime transport in bulk according to IMO instruments	5	
Annex II of MARPOL 73/78	Not applicable	

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## SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
0 %	

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

#### **National legislation Belgium**

c	tuifklasse België	Vlarem II, §4.4.7.1-2: Stuifklasse SC1 - stuifgevoelig, niet bevochtigbaar
ျ	tulikiasse beigle	Ivialentii, 34.4.7.1-2. Stunkiasse SCI - Stungevoeng, met bevochtigbaar

#### **National legislation The Netherlands**

Stu	uifklasse Nederland	Activiteitenbesluit milieubeheer, § 3.4.3.37-38, bijlage 3: Stuifklasse S1 - sterk stuifgevoelig, niet bevochtigbaar
Wa	aterbezwaarlijkheid	B (4); Algemene Beoordelingsmethodiek (ABM)

#### **National legislation Germany**

Lagerklasse (TRGS510)	11: Brennbare Feststoffe, die keiner der vorgenannten LGK zuzuordnen sind			
WGK	nwg; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017			
TA-Luft	5.2.1			

#### Other relevant data

TLV - Carcinogen	Polyvinyl chloride; A4
IARC - classification	3; Vinyl chloride, polyvinyl chloride and vinyl chloride-vinyl acetate copolymers

#### 15.2. Chemical safety assessment

No chemical safety assessment has been conducted.

# SECTION 16: Other information

(*)	INTERNAL CLASSIFICATION BY BIG
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ADI Acceptable daily intake

AOEL Acceptable operator exposure level

ATE Acute Toxicity Estimate

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

LC50 Lethal Concentration 50 %

LD50 Lethal Dose 50 %

NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration

OECD Organisation for Economic Co-operation and Development

PBT Persistent, Bioaccumulative & Toxic
PNEC Predicted No Effect Concentration
STP Sludge Treatment Process

vPvB very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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