

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

1.1. Product identifier

Product form:	Substance
Name:	Polyvinyl chloride, PVC
Trade names:	VICIR S450, S700, S800, S1000S, S1000W, S1200, S1500, S2000, S5000
EC-No.:	618-338-8
CAS-No.:	9002-86-2
HS code:	3904 10 00 polyvinyl chloride, not mixed with any other substances
REACH registration No.:	Exempt from REACH registration (polymer)

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

1.2.1. Relevant identified uses

Intended to be used in plastics manufacturing processes. For industrial use only.

1.2.2. Uses advised against

Not intended for consumer use.

1.3. Details of the supplier of the safety data sheet

Companhia Industrial de Resinas Sintéticas, CIRES Lda.

Rua da CIRES, 8

3860-160 Avanca - PORTUGAL

Phone: +351 234 811 200

Fax: +351 234 811 204

E-mail: Cristina.Costa@cires.pt

1.4. Emergency telephone number

Companhia Industrial de Resinas Sintéticas, CIRES Lda.: +351 234 811 200 (24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified.

2.1.2. Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

2.2.1. Classification according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable.

2.3. Other hazards

No additional information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Polyvinyl chloride	CAS-No.: 9002-86-2 CE-No.: 618-338-8 REACH-No.: Exempt from registration	> 99,7	Not classified

Notes:

This product contains residual vinyl chloride monomer (max. 1 mg/kg).

This product contains 100% of synthetic polymer microparticles (SPM).

3.2 Mixtures

Not applicable.

SECTION 4: First aid measures**4.1. Description of first aid measures**

First-aid measures general:	When in doubt or if symptoms are observed, get medical advice.
First-aid measures after inhalation:	Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact:	Wash skin with plenty of water and soap. Take off contaminated clothing. After contact with the molten product, cool rapidly with cold water.
First-aid measures after eye contact:	Rinse eyes with water as a precaution.
First-aid measures after ingestion:	Call a poison centre or a doctor if you feel unwell.

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

Symptoms/effects:	No acute and delayed symptoms and effects are observed.
Symptoms/effects after inhalation:	Dust from this product may cause irritation to the respiratory tract.
Symptoms/effects after eye contact:	Dust from this product may cause eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media:	Use extinguishing media appropriate for surrounding fire: water spray, dry powder, foam, carbon dioxide.
Unsuitable extinguishing media:	None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire:	Under fire conditions, hazardous fumes will be present: carbon dioxide, carbon monoxide, hydrogen chloride.
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5.3. Advice for firefighters

Precautionary measures against fire:	Do not allow run-off from fire-fighting to enter drains or water courses.
Protection during firefighting:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information:	Avoid dust formation.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

General measures:	Eliminate all ignition sources if safe to do so. No smoking.
6.1.1. For non-emergency personnel	
Protective equipment:	Wear recommended personal protective equipment. Refer to section 8.2. Remove contaminated clothing and shoes.
Emergency procedures:	Ventilate spillage area. Evacuate unnecessary personnel. Do not breathe dust. Avoid contact with skin, eyes and clothing. Avoid dust formation.
6.1.2. For emergency responders	
Protective equipment:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8.

6.2. Environmental precautions

This product contains synthetic polymer microparticles. Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	Stop leak if safe to do so.
Methods for cleaning up	Shovel or sweep up and put in a closed container for disposal.
Other information	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8. For disposal of residues refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling:

Wear personal protective equipment. Ensure good ventilation of the work station. Avoid contact with skin, eyes and clothing. Do not breathe dust. Avoid dust formation. All equipment used when handling the product must be grounded.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions:

Store tightly closed in a dry and cool place.

Incompatible materials/conditions:

Moisture.

Storage temperature:

Keep at temperatures below 30°C.

Heat and ignition sources:

Keep away from heat, sparks and flames.

7.3. Specific end use(s)

Not relevant.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

Ireland - Occupational Exposure Limits

Local name:

Polyvinyl chloride (PVC)

OEL (8 hours ref) (mg/m³):

10 mg/m³ total inhalable dust; 1 mg/m³ respirable dust

OEL (15 min ref) (mg/m³):

30 mg/m³ (calculated-inhalable dust); 3 mg/m³ (calculated-respirable dust)

Regulatory reference:

Chemical Agents Code of Practice 2021 – HAS

United Kingdom - Occupational Exposure Limits

Local name:

Polyvinyl chloride

WEL TWA (mg/m³):

10 mg/m³ inhalable dust; 4 mg/m³ respirable dust

WEL STEL (mg/m³):

30 mg/m³ (calculated-inhalable dust); 12 mg/m³ (calculated-respirable dust)

Regulatory reference:

EH40/2005, Fourth edition, 2020 – HSE

8.1.2. Recommended monitoring procedures

Monitoring methods:

Refer to European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) or equivalent national standard(s).

Refer to European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) or equivalent national standard(s).

Refer to European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) or equivalent national standard(s).

8.1.3. Air contaminants formed

No additional information available.

8.1.4. DNEL and PNEC

No additional information available.

8.1.5. Control banding

No additional information available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:	Wear eye protection.
Type:	Tightly fitting safety goggles.
Use:	Dust.
Standard:	EN ISO 16321-1.

8.2.2.2. Skin protection

Skin and body protection:	None under normal conditions.
Hand protection:	None under normal conditions.

8.2.2.3. Respiratory protection

Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.
Device:	Dust mask.
Filter type:	Type FFP2.
Condition:	Dust formation.
Standard:	EN 149.

8.2.2.4. Thermal hazards

No additional information available.

8.2.3. Other exposure controls

Environmental exposure controls:	Avoid release to the environment.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Solid (powder).
Colour:	White.
Odour:	Odourless.
Melting point:	Not available.
Freezing point:	Not applicable.
Boiling point:	Not applicable.
Flammability:	Non-flammable.
Explosive properties:	Fine dust dispersed in air may ignite The minimum ignition energy of fine dust in air is >1000 mJ (measured without induction).
Explosive limits:	Not applicable.
Flash point:	Not applicable.
Auto-ignition temperature:	> 500°C.
Decomposition temperature:	Decomposes at temperatures > 100°C.
pH:	Not applicable.
Viscosity, kinematic:	Not applicable.
Solubility in water:	Insoluble.
Solubility in organic solvents:	Soluble in tetrahydrofuran and cyclohexanone.
Octanol-water partition coefficient:	Not available.
Vapour pressure:	Not applicable.
Density:	~1400 kg/m ³
Relative density:	~1,4
Relative vapour density at 20°C:	Not applicable.
Particle size:	120 — 170 µm (Median diameter)
Particle size distribution:	63 – 250 µm

9.2 Other information**9.2.1. Information with regard to physical hazard classes**

No additional information available.

9.2.2. Other safety characteristics

Bulk density: 400 – 650 kg/m³
Softening point: ~80°C
Glowing temperature: Glowing temperature of a 5 mm product layer: >400°C

SECTION 10: Stability and reactivity**10.1. Reactivity**

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, sparks and flames. Protect from moisture. Avoid dust formation.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under fire conditions, hazardous fumes will be present: carbon dioxide, carbon monoxide, hydrogen chloride.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity (oral):	Not classified.
Acute toxicity (dermal):	Not classified.
Acute toxicity (inhalation):	Not classified.
Skin corrosion/irritation:	Not classified.
Serious eye damage/irritation:	Not classified.
Respiratory or skin sensitisation:	Not classified.
Germ cell mutagenicity:	Not classified.
Carcinogenicity:	Not classified.
IARC group:	3 - Not classifiable.
Reproductive toxicity	Not classified.
STOT-single exposure	Not classified.
STOT-repeated exposure	Not classified.
Aspiration hazard	Not classified.

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties**

Adverse health effects caused by endocrine disrupting properties: Contains no substances identified as having endocrine disrupting properties.

11.2.2. Other information

No additional information available.

SECTION 12: Ecological information**12.1. Toxicity**

Ecology - general: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute): Not classified.

Hazardous to the aquatic environment, long-term (chronic): Not classified.

12.2. Persistence and degradability

Not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation unlikely.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

No additional information available.

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties: Contains no substances identified as having endocrine disrupting properties.

12.7. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste):

Dispose this material and its container in accordance with local, regional, national and/or international regulations.

Waste treatment methods:

Do not discharge into drains or the environment (surface water, groundwater, soil, air). Recycling is preferred to disposal or incineration. Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations:

Keep container tightly closed. Do not rinse the container before disposal. Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information

14.1. UN number or ID number

ADR	IMDG	IATA	ADN	RID
Not regulated				

14.2. UN proper shipping name

ADR	IMDG	IATA	ADN	RID
Not regulated				

14.3. Transport hazard class(es)

ADR	IMDG	IATA	ADN	RID
Not regulated				

14.4. Packing group

ADR	IMDG	IATA	ADN	RID
Not regulated				

14.5. Environmental hazards

ADR	IMDG	IATA	ADN	RID
Not regulated				

Minimize airborne dust generation and prevent wind dispersal during loading and unloading.

14.6. Special precautions for user

Overland transport:	Not regulated.
Transport by sea:	Not regulated. IMO recommendations for the carriage of plastic pellets by sea in freight containers (MEPC.1/Circ.909 from 19 April 2024) are applicable to these products.
Air transport:	Not regulated.
Inland waterway transport:	Not regulated.
Rail transport:	Not regulated.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

This product contains 100 % of synthetic polymer microparticles. The synthetic polymer microparticles supplied are subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council (REACH Regulation).

This product is not listed on Annex XIV to REACH Regulation (Authorisation List).

This product does not contain substances listed on the candidate list of REACH Regulation.

This product is not subject to Regulation (EU) 2019/1021 on persistent organic pollutants.

This product is not included in the list of substances that deplete the ozone layer (Regulation (EU) 2024/590).

This product does not contain substances included in the list of explosives precursors (Regulation (EU) 2019/1148).

This product does not contain substances included in the list of drug precursors (Regulation (EC) No 273/2004).

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

Not required.

SECTION 16: Other information

Changes to previous revision:

Section 1.1: VICIR S450 added.

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS-No.	Chemical Abstract Service number
DNEL	Derived-No Effect Level
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
PVC	Polyvinyl chloride
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
UN	United Nations
vPvB	Very Persistent and Very Bioaccumulative
WEL TWA	Workplace Exposure Limits (Time Weighted Average)
WEL STEL	Workplace Exposure Limits (Short Term Exposure Limit)

Data sources:

ECHA (European Chemicals Agency), Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Training advice:

Ensure staff are informed of and trained on the nature of exposure and basic actions to minimise exposure.

Safety Data Sheet applicable for the following regions: IE - Ireland; UK - United Kingdom

Disclaimer

The information provided in this Safety Data Sheet concerns only the above mentioned product and is not necessarily valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for the particular use of this product.