

POLYVINYL CHLORIDE S TYPE for PLASTICIZED and RIGID PROCESSING

FOOD and PHARMACEUTICAL USE

Last revision 2008

Chemical Name: CAS NO.: 9002-86-2
Abbreviation: PVC

General Description:

Polyvinyl Chloride (PVC) is a fine, white, odorless powder, soluble in ketones and tetrahydrofuran. The product is obtained through the polymerization of vinyl chloride suspension.

PVC's major benefit is its compatibility with many different kinds of additives, making it a highly versatile polymer. Its compatibility with additives allows for the possible addition of flame retardants although PVC is intrinsically fire retardant because of the presence of chlorine in the polymer matrix.

PVC can be plasticised to make it flexible for use in flooring and medical products.

PVC has excellent electrical insulation properties, making it ideal for cabling applications. Its good impact strength and weatherproof attributes make it ideal for construction products.

Quality Technical Conditions for PVC OLTVIL for Plasticized Processing

Grade / Characteristics	MU	58 158100	70 170100	Testing methods
Appearance		white fine powder		visual
K - value		57.0-59.0	69.0-71.0	SR EN ISO 1628/1,2
Moisture and volatile substances, max.	%	0.3	0.3	ASTM D 3030
Bulk density-unsettled	g/cm ³	0.52-0.57	0.45-0.51	SR EN ISO 60
Plasticizer absorption, min.	%	80	95	ASTM D 1755
Calcination residues, max.	%	0.03	0.03	SR EN ISO 3451/5
Residue on the sieve of: - 0.250 mm, max. - 0.063 mm, min.	% %	1 95	1 95	SR EN ISO 4610
Black points max.	no./dm ²	2	2	SR EN ISO 1265
Fish eye, max.	no. / dm ²	2	2	ILL 003/4-08-01
Vinyl chloride residue, max.	ppm	1	1	PhE ed. 5 -2005
Reducing substances, max.	ml KMnO ₄ 0,002M	2	2	PhE ed. 5 -2005

Note: The above characteristics are tested on an average sample collected from 5% of the packages in a batch.

Quality Technical Conditions for PVC OLTVIL for Rigid Processing

Grade / Characteristics	MU	58		67		Testing methods
		158360		167360		
Appearance		white fine powder				visual
K - value		57.0-59.0		66.0-68.0		SR EN ISO 1628/1,2
Bulk density-unsettled (vol.) min.	g/cm ³	0.55		0.55		SR EN ISO 60
Moisture and volatile substances, max.	%	0.3		0.3		ASTM D 3030
Calcination residues, max.	%	0.03		0.03		SR EN ISO 3451/5
Residue on the sieve of: - 0.250 mm, max. - 0.063 mm, min.	% %	5.0 95		5.0 95		SR EN ISO 4610
Impurities and black points, max.	no./dm ²	2		2		SR EN ISO 1265
Fish eye , max.	no./dm ²	5		-		ILL 003/4-08-01
Vinyl chloride residue, max.	ppm	1		1		PhE ed. 5 -2005
Reducing substances, max.	ml KMnO ₄ 0,002M	2		2		PhE ed. 5 -2005

Note: The above characteristics are tested on an average sample collected from 5% of the packages in a batch.

Specific Properties:

Ignition temperature	391°C
Decomposition temperature	>120°C
Self-ignition temperature	454°C (in layer)

The values of those characteristics are approximated, and are only for general information and are not part of the technical quality conditions

Main Applications:

- Cell panels, doors and windows;
- Pipes and fittings;
- Food and industrial packages;
- Para pharmaceuticals;
- Medical equipment: containers for blood; tubing for dialysis; surgical and examination gloves; splints, etc.



Shipping Information:

- valve paper bags, 25kg net (permissible limits $\pm 0.2\text{kg}$), palletized and wrapped with polyethylene film.
- 1,100 or 1,300 kg big bags of polypropylene lined with polyethylene (permissible limits $\pm 5\text{kg}$).
- silo wagons; silo trucks.

Storage:

The product should be stored in cool, dry and well vented areas far from inconsistent materials.

Earthed storage silos are recommended as Polyvinyl Chloride presents the risk of electrostatic energy storage.

Safety Considerations:

Please refer to the product Material Safety Data Sheet (MSDS) offering customers help to better satisfy their particular handling, safety and disposal needs and those that may be required by locally applicable health and safety regulations.

Warning:

Under normal use conditions, Polyvinyl Chloride is considered to present minimal hazard from a human health and environmental.

Typical of all non-soluble dusts, inhalation may cause pulmonary damage.

Polyvinyl chloride may cause eye irritation. Direct eye contact causes allergic dermatitis and conjunctivitis.

Attention:

Information contained in this document is provided to the best of our knowledge and experience. Please contact OLTCHIM to see if the document has been revised.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.