BASF
We create chemistry

® = Registered trademark of BASF SE

Palamoll® 632

**Medium viscosity polymeric plasticizer for PVC and paints.
Good resistance to oil and aliphatic hydrocarbons.
Palamoll 632 is approved for use in plasticized PVC articles for food contact applications.**

Chemical nature

Polymeric plasticizer derived from adipic acid and 1,2-propanediol

CAS number 55799-38-7

EINECS compliant (raw materials listed in EINECS)

Delivery specification

Property	Value	Unit	Test method DIN/ASTM
Dynamic viscosity at 20 °C	2000 – 3500	mPa · s	DIN 53019/D 7042
Density at 20 °C	1.140 – 1.150	g/cm³	DIN 51757/D 4052
Platinum-cobalt color	150 max.		DIN EN ISO 6271-2/ D 5386
Refractive index n_D^{20}	1.462 – 1.464		DIN 51423/D 1045
Acid value	2 max.	mg KOH/g	DIN EN ISO 2114/ D 1045
Water content	0.05 max.	% by weight	DIN 51777, Part 1/ E 203

Properties

Palamoll 632 is a slightly yellowish, practically anhydrous liquid and has a mild ester odor. It is soluble in the usual organic esters, ketons, ethers, aromatic and chlorinated hydrocarbons. The product is practically insoluble in water, aliphatic hydrocarbons, vegetable and animal oils.

When Palamoll 632 is mixed with monomeric plasticizers, a miscibility gap is observed, so that it is necessary to verify their suitability before use.

Palamoll 632 is listed for use in food-contact applications.
Information on its regulatory status according to food-contact legislation is available in a separate document that we would be pleased to send you on request.

Physical data

The following physical data were measured in the BASF SE laboratories. They do not represent any legally-binding guarantee of properties for our sales product.

Pour point (DIN ISO 3016) – 16 °C

Density/viscosity	Temp. [°C]	Density* ρ [g/cm^3]	Dyn. viscosity η [mPa·s]
	5	1.1566	13200
	10	1.1522	6300
	20	1.1435	2340
	30	1.1348	1000
	40	1.1261	500
	50	1.1175	270

Solution temperature at the clear point (5 % S-PVC, K-value 71; DIN 53408) 162 °C

Specific heat C_p	T [°C]	C_P [J/g·K]
	20	1.76
	60	1.86
	100	1.97

Surface tension 50 °C (Drop volume method BASF) 38.6 mN/m

Storage & Handling

Palamoll 632 can be stored in tanks and drums constructed from normal carbon steel, e. g. A 283 grade. If severe demands are imposed on the product quality, we recommend that it be stored in tanks constructed from stainless steel, e. g. AISI TP 316 Ti (German steel No. 1.4541) or aluminium ($AlMg_3$).

It is recommended that steps be taken to ensure the exclusion of atmospheric moisture, e. g. by storing under a blanket of dry nitrogen, as otherwise the product quality may deteriorate, e. g. the water fraction may rise, or the Palamoll 632 may be discolored by rust in normal steel tanks.

Drums containing the product should be kept tightly closed in a well-ventilated place.

Palamoll 632 can be stored for one year at temperatures below 40 °C, if moisture is excluded. Exeeding the recommended storage temperatur can cause degradation of the product with negativ impact on the quality.

If Palamoll 632 is stored at a temperature significantly below 20 °C it can become wax-like and may even solidify. However, this does not affect its technical properties. Prior to further handling and processing, though, it should be heated to approx. 30 °C to ensure that it attains the values given in the Delivery Specification. Only dedicated equipment should be used to discharge this product.

Pumps:
Cast-steel centrifugal pumps with a simple slip-ring seal are suitable.

Flange seals:
An example of a suitable material for seals is chemical-resistant Polytetrafluoroethylene (PTFE). Other plastics should be checked for suitability before they are taken into use.

Safety

When using this product, the information and advice given in our **Safety Data Sheet** should be observed. Due attention should also be given to the **precautions** necessary for handling chemicals.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.

February 2015

BASF SE
Operating Division Petrochemicals
Regional Business Unit Industrial Petrochemicals Europe
67056 Ludwigshafen, Germany
Visit us on-line at http://www.plasticizers.basf.com