

# Palamoll® 652

Low viscosity polymeric plasticizer that is compatible with PVC. Resistant to oils, fats, aliphatic hydrocarbons and bitumen. It has only a slight tendency to migrate into plastics. It is well suited for the manufacture of plastisols.

<b>Product Number</b>	50000035 bulk 51279236 drums
<b>BASF Registered Name</b>	Palamoll® 652
<b>CAS No.</b>	208945-13-5
<b>Average Molecular Weight</b>	3300

Product Specifications	Value	Test Method
Specific Gravity @ 25°/25 °C	1.044 - 1.064	ASTM D-4052
Viscosity @ 25 °C, cP	1,100 - 1,600	ASTM D-445
Acid Number, mg KOH/g (maximum)	1.5	ASTM D-1045
Water, by weight (% maximum)	0.1	ASTM E-203
Color, Pt-Co Units (APHA, maximum)	150	ASTM D-5386
Refractive Index n <sup>25</sup> <sub>D</sub>	1.460 - 1.465	ASTM D-1045
Suspended Matter	COLSFFM*	visual

\*Clear Oily Liquid Substantially Free of Foreign Material

**Typical Physical Properties**

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

		Value
Vapor Pressure @ 20 °C, mbar		< 0.1
Storage Temperature, minimum, °C		> 30
Pour point, °C		-25
Solubility @ 25 °C in water, mg/L		< 0.1
	Dynamic viscosity [cP]	Density [g/cm <sup>3</sup> ]
@ -10 °C	43,000	1.081
@ -5 °C	21,200	1.076
@ 0 °C	12,000	1.073
@ 5 °C	7,190	1.069
@ 10 °C	4,480	1.065
@ 20 °C	1,940	1.057
@ 40 °C	510	1.041
@ 60 °C	186	1.027
@ 80 °C	86	1.013
Ignition Temperature, °C		410
Flash point (COC), °C		252
Odor		mild characteristic
Surface Tension, mN/m,		35.0
Solution Temperature, °C,		152
Plastisol Gelation Temperature, °C		134

**Description**

Palamoll® 652 is a low viscosity polymeric plasticizer that is compatible with PVC. It is based on adipic acid and polyhydric alcohols. It is resistant to oils, fats, aliphatic hydrocarbons and bitumen. Because of its low viscosity and ease of processing Palamoll® 652 is used in plastisol formulations. Monomeric plasticizers can be mixed with Palamoll® 652 to further reduce the viscosity and improve the processing, however, this will adversely affect the extraction and migration performance of the plasticized PVC.

**Applications**

Products that need greater resistance to extraction by oils, fats and aliphatic hydrocarbons than monomeric plasticizers should use Palamoll® 652. Palamoll® 652 has a higher molecular weight than monomeric plasticizers and must be processed at a higher fusion temperature. Palamoll® 652 should be pre-heated to 80°C before being added in the mixing cycle.

**Safety**

Based on toxicity studies, Palamoll® 652 has a low order of toxicity and does not require special handling. Handle in accordance with good industrial hygiene and safety practices. Avoid eye contact by wearing personal protective equipment. If eye contact occurs, wash with flowing water and contact physician.

Avoid repeated or prolonged skin contact. Avoid breathing vapors by providing adequate ventilation.

Always refer to the Safety Data Sheet (SDS) for detailed information on safety.

**Storage and Handling**

Palamoll® 652 can be stored for one year at temperatures below 40°C, if moisture is excluded.

If Palamoll® 652 is stored below 20 °C or for a long time at room temperature, it can become wax-like, cloudy and even solidify. This does not affect the properties of the ester. Upon reheating to 30 °C, Palamoll® 652 returns to a liquid state and conforms to its product specifications.

**Packaging**

Palamoll® 652 is available in bulk tank trucks or drums.

**Contact Information****Marketing**

BASF Corporation  
11750 Katy Freeway, Suite 120  
Houston, TX 77079, USA

Tel: +1 800-533-8961  
Fax: +1 713-759-3036  
E-mail: [plasticizers@basf.com](mailto:plasticizers@basf.com)

**Technical Support**

BASF Corporation  
4403 La Porte Highway 225  
Pasadena, TX, 77501, USA

Tel: +1 281-884-4473 or -4432  
Fax: +1 281-884-4302

**Visit us online at**

<http://www.plasticizers.basf.com>

**Note**

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