Plasticizers

This Range Chart, updated in March 2020, covers our line of plasticizers:

Palatinol®
Plastomoll®
Hexamoll®
Palamoll®

All the figures quoted are intended solely as a guide and are not biding for the properties of the products that we place on the market. The definitive product specifications for our plasticizers are published in the Technical Datasheets for the individual products.

If you have any technical questions, please feel free to contact our Technical Support Team.

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

The data given in the range chart apply to the formulation quoted. The properties of the final product can be adapted to meet specific requirements by blending it with additives such as lubricants, stabilizers and antioxidants.

Plasticizers – Typical Product Data

BASF Product Name	Generic Name	CAS Number	Absolute Viscosity at 20 °C [cP] ASTM D445	Absolute Viscosity at 25 °C [cP] ASTM D445	Specific Gravity at 20/20 °C ASTM D 4052	Specific Gravity at 25/25 °C ASTM D 4052	Density at 20 °C [g/cm³]	Refractive Index nD20 ASTM D 1045	Color, APHA [Pt-Co] ASTM D 5386	Acid Value [mg KOH/g] ASTM D 1045	Ester Content [% Weight] ASTM D 3465	Water Content [% by Weight] ASTM E 203	Pour point [° C] ASTM D 97	Solution temp. Clear Point, °C BASF method	Volatiles, wt% ASTM D 2369, 1hr @ 110 °C	Flash Point, °C COC ASTM D 2378
Palatinol® products (Terephthalate)																
Palatinol® DOTP	DOTP	6422-86-2	86	63	0.984	0.981	0.982	1.488	≤ 25	≤ 0.1	≥ 99.6	≤ 0.1	< -45	146	0.49	232
Hexamoll® products (Cyclohexane-1,2-dicarboxylate)																
Hexamoll® DINCH	DINCH	474919-59-0	52	39	0.949	0.947	0.948	1.463	≤ 40	≤ 0.07	≥ 99.5	≤ 0.1	-54	150	0.65	224
Palatinol® products (Phthalates)																
Palatinol® N	DINP	28553-12-0	73	56	0.975	0.974	0.973	1.486	≤ 25	≤ 0.07	≥ 99.6	≤ 0.1	< -45	128	0.36	240
Palatinol® DPHP	DPHP	53306-54-0	119	86	0.964	0.960	0.962	1.484	≤ 25	≤ 0.07	≥ 99.5	≤ 0.1	< -45	141	0.25	232
Palatinol® 911P	911P	68515-43-5	61	45	0.959	0.959	0.959	1.485	≤ 50	≤ 0.07	≥ 99.6	≤ 0.1	-20	135	0.15	227
Palatinol® 111P-I	DUP	3648-20-2	64	50	0.954	0.951	0.952	1.481	≤ 50	≤ 0.07	≥ 99.6	≤ 0.1	0	149	0.13	254
Palatinol® products (Trimellitates)																
Palatinol® TOTM	TOTM	3319-31-1	292	207	0.991	0.987	0.989	1.485	≤ 100	≤ 0.2	≥ 99.0	≤ 0.1	< -45	141	0.14	250
Palatinol® 810TM	810TM	68130-50-7 (U.S. and Canada) 90218-76-1 (for other regions).	137	104	0.975	0.972	0.974	1.484	≤ 200	≤ 0.1	≥ 99.0	≤ 0.1	-44	154	0.3	274
Plastomoll® products (Adipates)																
Plastomoll® DOA	DOA	103-23-1	14	11	0.927	0.925	0.926	1.446	≤ 25	≤ 0.1	≥ 99.6	≤ 0.1	-75	144	2.41	199
Plastomoll® DNA	DINA	33703-08-1	20	17	0.923	0.920	0.922	1.448	≤ 25	≤ 0.1	≥ 99.6	≤ 0.1	-68	154	0.81	215
Palamoll® products (Polyesters of aliphatic dicarboxylic acids)																
Palamoll® 652	652	208945-13-5	1940	1340	1.059	1.054	1.057	1.463	≤ 150	≤ 1.5	-	≤ 0.1	-25	152	0.89	252
Palamoll® 654	654	208945-12-4	4910	3430	1.085	1.079	1.083	1.467	≤ 150	≤ 1.5	-	≤ 0.1	-18	156	0.68	288
Palamoll® 656	656	208945-12-4	11400	7950	1.095	1.093	1.093	1.468	≤ 150	≤ 1.5	-	≤ 0.1	-10	158	0.54	274

Plasticizers – Properties of Plasticized PVC*

BASF Product Name	Generic Name	CAS Number	Tensile Strength [psi] ASTM D 638	Ultimate Elongation [%] ASTM D 638	100% Modulus [psi] ASTM D 638	Brittleness temperature, T_b [°C] ASTM D 746	Torsional stiffness, T_f [°C] ASTM D 1043	Shore A Hardness at 23°C (15 seconds) ASTM D 2240	Volatility, 24 hours at 70°C [% Weight] ASTM D 1203	Volatility, 24 hours at 100°C [% Weight] BASF method	Oil Extraction, 50°C, K SPI-VD-T 13	Water Extraction, 24 hrs at 70°C [% Weight] SPI-VD-T 12	Efficiency Factor at Shore A = 75 DOP = 1
Palatinol® products (Terephthalate)													
Palatinol® DOTP	DOTP	8422-86-2	2230	430	940	-44	-36	69	0.3	2.0	11.2	0.1	1.08
Hexamoll® products (Cyclohexane-1,2-dicarboxylate)													
Hexamoll® DINCH	DINCH	474919-59-0	2150	340	1110	-46	-44	73	0.5	2.3	30.0	0.4	1.10
Palatinol® products (Phthalates)													
Palatinol® N	DINP	28553-12-0	2190	400	960	-43	-38	68	0.2	1.3	10.9	0.2	1.05
Palatinol® DPHP	DPHP	53306-54-0	2240	420	1050	-37	-37	71	0.3	1.0	13.9	0.2	1.11
Palatinol® 911P	911P	68515-43-5	2310	410	1080	-49	-48	71	0.1	0.4	19.5	0.1	1.07
Palatinol® 111P-I	DUP	3648-20-2	2050	410	980	-49	-48	72	0.3	0.3	28.0	0.4	1.16
Palatinol® products (Trimellitates)													
Palatinol® TOTM	TOTM	3319-31-1	2460	400	1350	-34	-28	72	0.3	0.3	8.6	0.9	1.14
Palatinol® 810TM	810TM	68130-50-7 (U.S. and Canada) 90218-76-1 (other regions).	2240	390	1250	-45	-43	76	0.6	0.3	25.1	0.2	1.15
Plastomoll® products (Adipates)													
Plastomoll® DOA	DOA	103-23-1	1860	460	735	-67	-62	65	3.7	7.8	26.0	0.2	0.95
Plastomoll® DNA	DINA	33703-08-1	1910	430	810	-68	-64	68	1.0	4.8	35.0	0.3	1.00
Palamoll® products (Polyesters of aliphatic dicarboxylic acids)													
Palamoll® 652	652	208945-13-5	2250	410	1020	-21	-17	71	0.2	0.9	0.9	0.9	1.10
Palamoll® 654	654	208945-12-4	2210	410	970	-22	-17	70	0.3	0.5	0.8	0.9	1.06
Palamoll® 656	656	208945-12-4	2450	430	1110	-25	-16	70	0.2	0.4	0.4	0.9	1.10

* Formulation: 100 PVC Oxy 225 P
70 Plasticizer
3 Stabilizer Baerlocher 1760 A

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

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

Tel: +1 281-884-4473 or -4423
Fax: +1 281-884-4302

Visit us online at
http://www.plasticizers.basf.com

Note

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