



# EDENOL® 9789

**Revision-No.:**

0-10.2000 Effective November 1, 2000

**Description**

Polymeric Plasticizer

**Appearance**

Yellow viscous liquid

**Technical Data**

Acid value	0 - 5.0 mg KOH/g
Hydroxyl value	0 - 22 mg KOH/g
Color, Gardner	0 - 4
Viscosity (100 °C)	950 - 1150 mm <sup>2</sup> /s

**Further Details**

Solidification point approx. - 29 °C

**Applications**

EDENOL® 9789 Polymeric Plasticizer is a viscous, high molecular weight plasticizer which provides the optimum in permanence properties for PVC formulations. It is widely used as a trackifier and calender tacking aid. EDENOL® 9789 is also used in high-temperature wire insulation where low volatility, compatibility and color are of extreme importance.

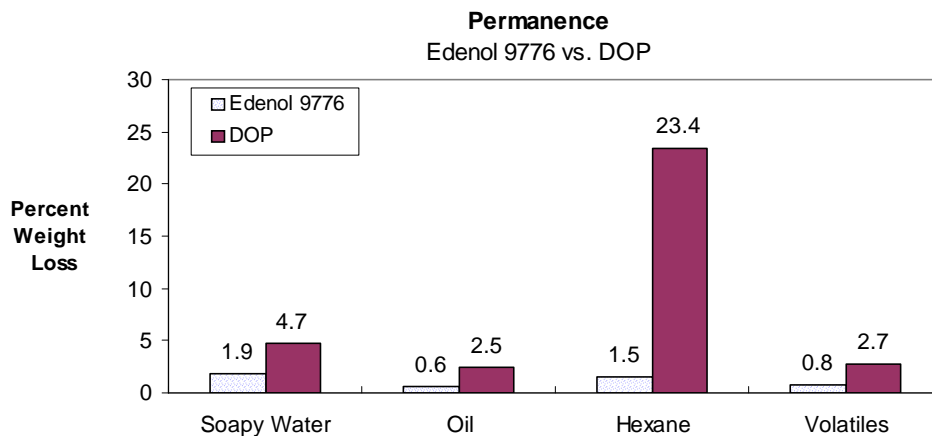
**Properties**

**Vinyl Performance Properties of EDENOL® 9789**

	EDENOL® 9789	DOP Control
Plasticizer concentration, phr1	67	50
Physicals, Instron, 5"/min.,		
Elongation, %	325	310
Modulus, psi at 100% elongation	1375	1500
Tensile strength, psi	2800	3075
Hardness, Shore A Durometer, inst./10 sec.	84/79	85/80
Roll spew, 5 hours	none	none
Low temperature		
Brittle point, ASTM D-746, °C	-20	-27
Masland impact, ASTM 1593, °C	-20	-25

Clash-Berg, °C		
T - 10,000	+9.5	+4.5
T - 45,000	-3	-10.5
T - 135,000	-15	-25.5
Humidity aging, % wt. loss 9 days, 90°C, 95% R.H.	17.4	0.1
Extractions, % wt. Loss		
Soapy water, 90°C		
1 day	1.4	4.7
3 days	2.2	8.8
7 days	2.8	10.3
Oil, 50°C		
1 day	0.0	2.5
3 days	0.1	5.0
7 days	0.3	7.7
Hexane, 25°C, 1 day	0.5	23.4
Volatility, 90°C, % wt. loss		
1 day	1.0	2.7
3 days	1.5	7.5
7 days	2.2	13.8
Heat stability, @ 375°F, minutes to 1st color/final degradation	60/80+	80/80+
Laquer mar, % softening @ 50°C, 1 day		85
SBR paper migration, % wt. loss, 70°C, 7 days	0.3	8.5

**Properties** (continued)



1 Formulation: PVC resin                      100 phr  
                  Plasticizer                    efficiency concentration  
                  Stabilizer (Ba-Cd)                3

2 Formulation: PVC resin                      100 phr  
                  Dythal                                10  
                  Burgess pigment                7

## Plasticizer efficiency concentration

Efficiency concentration is defined as the amount of plasticizer (phr) required to yield a modulus of 1500 psi  $\pm$  150 psi at 100% elongation on an Instron with a crosshead speed of 5 inches/minutes at 72  $\pm$  1°F.

### **Analysis methods**

Acid value	AOCS Te 1a-64
Hydroxyl value	AOCS Cd 13-60
Color	AOCS Td 1a-64
Viscosity	ASTM D 445-97

Subject to appropriate storage under the usual storage and temperature conditions, our products are durable for at least 2 years.

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created on 08/02/2000 by Julia Falter/OPG/Henkel Americas, last modified on 06/20/2009 by Margarete Gruenert/DE/EMEA/EmeryOleo