

Pano PVC-Compound X

Migrationdata according VO EU 10/2011

Designation: will be communicated under request

Description: Sealing-gasket based on PVC with plasticizer ESBO

1. Closure-specific global migration

For closures types: TWO, TWS, TSB, TOB, DTO, DOB, DRO, DDO

Conditions: 1 h 100°C and 10 d 40 °C

Diameter [mm]	Simulant B 3 % Acetic acid		Simulant D1 50% Ethanol		Simulant D2 Olive oil	
	Average global migration [mg]	Mimumum jar volume 60 mg/kg [ml]*	Average global migration [mg]	Mimumum jar volume 60 mg/kg [ml]	Average global migration [mg]	Mimumum jar volume 60 mg/kg [ml]
48	0,4	>5	3,7	>60	Conditional application	
53	0,5	>5	4,6	>80		
58	0,6	>10	5,4	>90		
63	0,6	>10	5,9	>100		
66	0,7	>10	6,7	>110		
70	0,8	>15	7,0	>120		
77	0,8	>15	7,5	>130		
82	0,9	>15	8,3	>140		
89	1,0	>15	8,9	>150		

The values are calculated based on compound-contact-areas.

*For no common container-size it is expected that the migration-limit may be exceeded.

2. Specific migration

Substances with a specific migration limit

The compound contains following substances with a specific migration limit:

FCM	PM-Ref	Substance	CAS-No.	Restriction
775	45705	1,2-Cyclohexane dicarbonyl acid, Diisononyl ester	0166412-78-8	SML = 60 mg/kg
127	26050	Vinyl chloride	75-01-4	QM = 1 mg/kg
138	93760	Tributyl acetyl citrate (ATBC)	77-90-7	SML = 60 mg/kg
511	91920	Barium sulfate (as Barium)	7727-43-7	SML = 1mg/kg
532	88640	Epoxy-enhanced Soybean oil	8013-07-08	SML = 60 mg/kg

The compound contains furthermore components where the generic SML of 60 mg/kg according art. 11 (2) can be applied. The identity of these components is confidential but may be communicated to independent testing institutes in necessary cases.

Based on the tests applied considering the restriction under No.1 there is no exceedance of the limits expected.

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3. Final Evaluation of the migration results

Assumed that the compound will be used for a closure with a diameter of 66 mm on a 200 ml size jar with a total inside surface of 195 cm² and a food contact area of 5 cm² following data can be calculated

Conditions: 1h 100°C and 10 d 40°C

Simulant	mg/ closure	mg/ dm ²	mg/kg food
B 3% Acetic acid	0,7	0,35	3,5
D1 50 % Ethanol	6,7	3,35	33,5

In general every type of compound has to be tested on its suitability for the individual food.

4. DUAL USE Additives

The compound contains according its formulation following substances which may also be used as food-ingredients

FCM	PM Ref	Substance	CAS-No.	E-No.
no	93440	Triacetine	keine	1518
610	93440	Titanium dioxide	13463-67-7	E171