

TECHNICAL DATA SHEET (TDS) SharkDispersionSX2™

SUBJECT	CONTENT	COMMENT														
PVB polymer	Recycled plasticized PVB from safety glass applications – SharkFlakesC1™ & SharkFlakesC2™	Hydroxyl content ~ 12 % Butyral content ~ 64 % Nonvolatile softeners ~ 22 % Calculated molecular weight X 104: 70 - 300.000 meaning average values approx. 200.000														
Plasticizer type and content	Analysis made of SharkFlakesC1 raw-material for the dispersion. Dissolution in organic solvent and analyzing by gas-chromatography with mass selective detection.	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Results in mg/kg</th> </tr> </thead> <tbody> <tr> <td>Adipates</td> <td></td> </tr> <tr> <td>Di-n-Hexyladipate</td> <td>Not detected</td> </tr> <tr> <td>Di(butoxyethyl)adipate</td> <td>1.800</td> </tr> <tr> <td>Phthalates</td> <td>Not detected</td> </tr> <tr> <td>Others</td> <td></td> </tr> <tr> <td>Triethyleneglycol-bis(2-ethylhexanoate) (TEG-EH)</td> <td>230.000</td> </tr> </tbody> </table>	Parameter	Results in mg/kg	Adipates		Di-n-Hexyladipate	Not detected	Di(butoxyethyl)adipate	1.800	Phthalates	Not detected	Others		Triethyleneglycol-bis(2-ethylhexanoate) (TEG-EH)	230.000
Parameter	Results in mg/kg															
Adipates																
Di-n-Hexyladipate	Not detected															
Di(butoxyethyl)adipate	1.800															
Phthalates	Not detected															
Others																
Triethyleneglycol-bis(2-ethylhexanoate) (TEG-EH)	230.000															
Surfactant	Potassium Oleate															
pH	9,0 - 10,0															
Brookfield Viscosity, RVT No. 2 spindle, 50 rpm @ 20°C	Viscosity 50-250 mPa·s	PVB dispersion is a colloid and a Non-Newtonian liquid.														
Total Solids % w/w	46,0 – 49,0															
Particle Charge	Anionic	Adding cationic components will make the dispersion unstable.														

Conductivity	The dispersions are slightly antistatic.	Further antistatic agents can be added upon request.
Density	1,03 kg/ltr.	1,0 – 1,1 kg/ltr.
	Input material source: Post-consumer	Particle size d(0,5) (Microtrac DLS equipment), dry film appearance: < 0,300 µm, clear hazy
Delivery form	Milky white to greyish Dispersion	Filtered 200 Microns
Minimum Film Formation Temperature (MFFT)	0 °C	Tg (plasticized PVB): - 10 °C (Tg (non-plasticized PVB): 62 - 78 °C)
Biocides	Acticide MBS™ Promex™	To make the dispersion antibacterial and ensure increased shelf life. BIT <375 ppm ; MIT < 15 ppm
Application areas	Paints/Coatings	Performance enhancing co-binder with improved formulation latitude and resistance to water after drying. Stirring before use is mandatory.
UV resistance		Very little UV absorption, but inert to UV light. The binder will not be degraded by UV radiation.
Storage stability	To be kept from freezing conditions	Passes minimum one freeze-thaw cycle @ -20 °C in 72 hours. Shelf life in unopened containers is minimum one year. Stirring before use is mandatory.

Revised: 01122020FM