

## SPECIALTY BENZOATE ESTER PLASTICIZERS

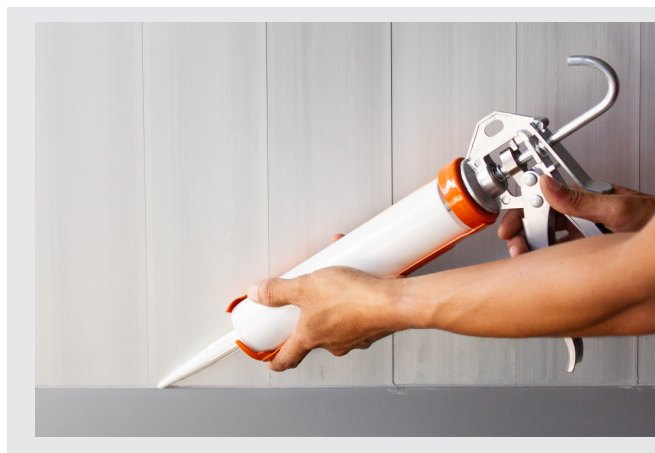
Hallstar is a global leader in the design and production of monomeric and polymer ester chemistries. We produce both synthetic and renewably sourced esters used to modify a broad polarity range. Through a recent acquisition, we have expanded our line with high MW/low volatility specialty benzoate esters.

**Uniplex™ 260** (Glyceryl Tribenzoate) is a solid polyol plasticizer, processing aid, and modifier for a wide range of polymers and a heat-activated plasticizer for hot melt adhesives made from PVA, polyester, and acrylic resins.

**Uniplex™ 354** (TMP Dibenzoate) is a plasticizer that possesses high solvating characteristics for adhesives, caulks, sealants, and PVC plastisols.

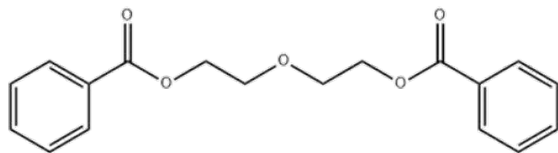
**Uniplex™ 512** (NPG Dibenzoate) is a low melt, waxy-solid plasticizer with low volatility, compatibility in acrylic, and excellent UV stability. It's an effective clean-out product for hot melt, coating, and laminating equipment.

**Uniplex™ 552** (PE Tetrabenzoate) is a solid polymer modifier used in heat activated adhesives. FDA 21 CFR 175.105. It is recommended for high heat activation temperature products and structural 2K acrylic systems.

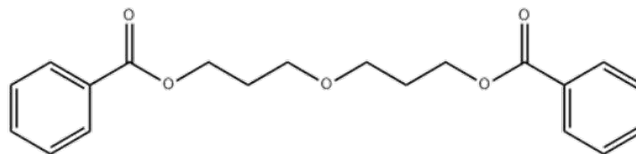


	COMMODITY BENZOATES		SPECIALITY UNIPLEX™ BENZOATES				
Trade Name	N/A	N/A	Uniplex™ 260	Uniplex™ 354	Uniplex™ 512	Uniplex™ 552	Uniplex™ 641
Chemical ID	DEGDB	DPGDB	GTB	TMP DB	NPG DB	PE TetraB	CHDM DB
Physical Form	Liquid	Liquid	Solid	Liquid	Solid	Solid	Solid
CAS #	120-55-8	27138-31-4	614-33-5	68052-23-3	4196-89-8	4196-86-5	35541-81-2
Melt Point (°C)	18	27	72	10	49	103	118
Boiling Point (°C)	236	232	548	346	436	684	472
MW	314	342	404	354	312	552	352

## COMMODITY BENZOATES

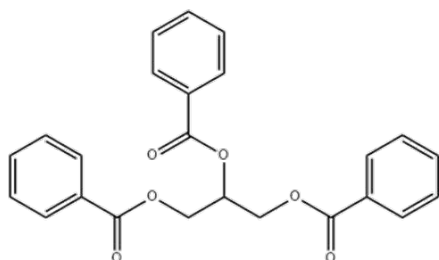


Diethylene glycol dibenzoate

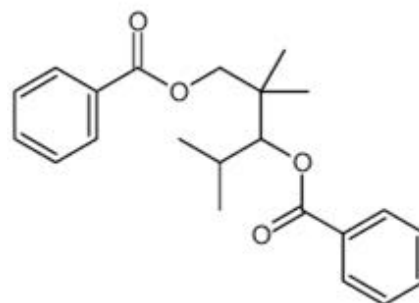


Dipropylene glycol dibenzoate

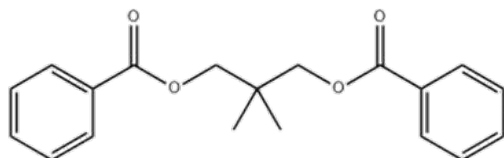
## SPECIALTY UNIPLEX™ BENZOATES



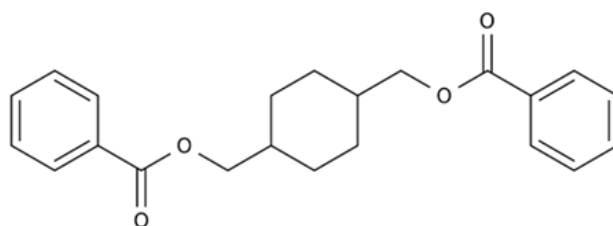
Uniplex™ 260 – GTB  
Uniplex™ 270 – Liquid GTB



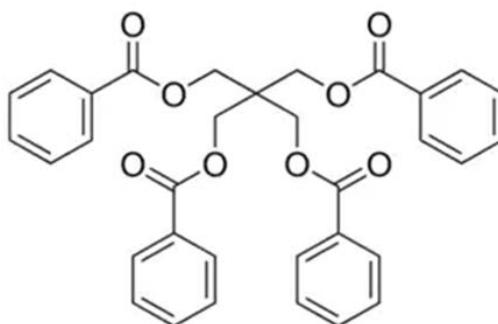
Uniplex™ 354 – TMP Dibenzoate



Uniplex™ 512 – NPG Dibenzoate



Uniplex™ 641 – CHDM Dibenzoate



Uniplex™ 552 – PE Tetra benzoate