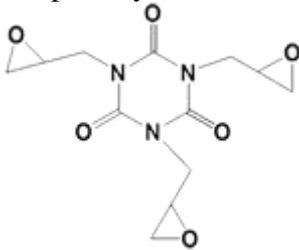


TEPIC[®]

TEPIC[®], Tris (2,3-Epoxy propyl) Isocyanurate, is a unique symmetrical triazine contains tri-functional epoxy compound which entirely different from conventional bisphenol type epoxy resin. TEPIC is well suited for electronic coatings and plays a crucial role as the the cross-linker integrity of solder mask, in tranparency of LEDs, and in outdoor durability of powder coating.



Applications of TEPIC

TEPIC consists of triazine nucleus and three glycidyl group. TEPIC triazine nucleus imparts outdoor durability due to low UV absorption.

TEPIC three glycidyl group imparts high heat resistance due to high cross link density. TEPIC has a wide variety of industrial applications such as:

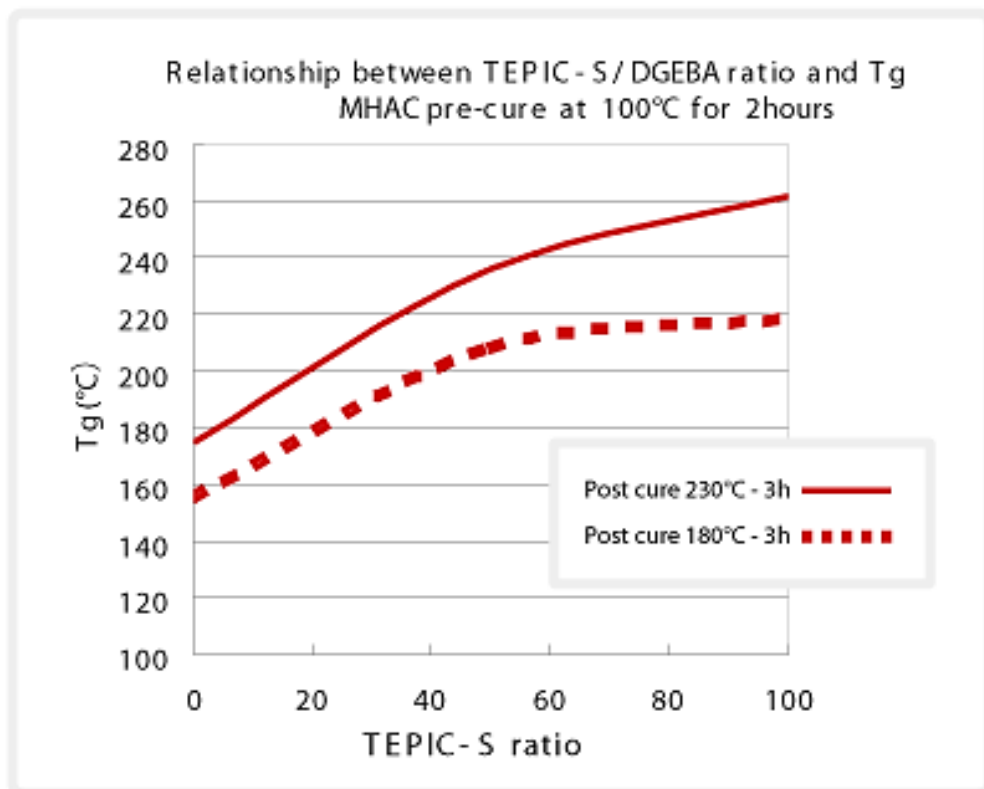
- Print circuit board (PCB)
 - Top-coated ink
 - Solder-resistant ink (PCB solder mask)
 - High performance SRI for PC and Cell Phone
 - Short circuit prevention: Permanent protective coating of PCB
 - Increased heat and solvent resistance– Resolving power up
- Transparent encapsulate (LED, CCD)
- Semiconductor encapsulate
- Plastic, rubber, and adhesive additive
- Outdoor polyester powder coating

Properties of TEPIC

- High cross-linking density with excellent heat resistance and thermosetting performance.
- Minimum UV and lighting absorption provide with superb visibility.
- Disperse fine powder with suspension stability for reactive latency.
- Low chlorine contents, inhibit deterioration and electrolytic corrosion.

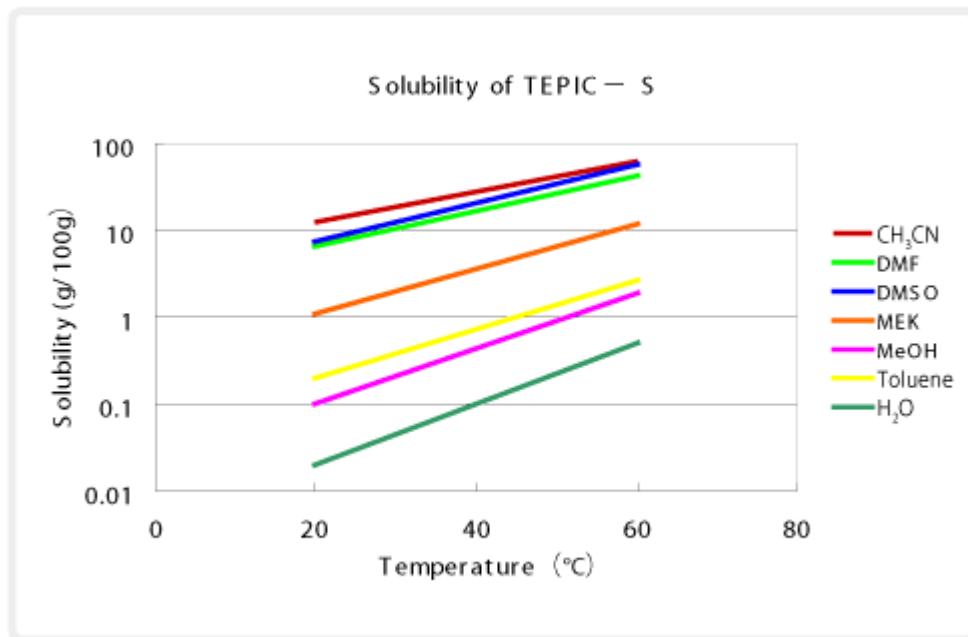
TEPIC [®]	G	S	SP	SS	HP	L
Appearance	Granule	Powder	Fine Powder	Powder	Powder	Powder
Particle Size (nm)	4-42 mesh 99%	42 mesh pass > 99%	2.0 μm > (Median)	42 mesh pass > 99%	3-6 μm (Median)	TBA
Melting Point °C	90-125	95-125	95-125	99-125	140-160	95-125
Epoxy Equivalent Weight (g/equiv.)	< 110	< 105	< 105	< 102	< 105	< 105
ECH content (ppm)	< 100	Not Detected	Not Detected	Not Detected	<500	<900
Hydrolyzable Chlorine (%)	< 2.0	< 0.15	< 0.15	< 0.03	< 0.03	TBA
Viscosity (CPS) 120°C	< 100	< 100	< 100	< 100	< 100	< 100

TEPIC-S / DGEBA ratio and Tg



Solubility of TEPIC-S

TEPIC has high crystallization, high melting point, and hard solubility.



Solubility of TEPIC-L

TEPIC-L is a high-solubility grade.

25°C

Solvent	Solubility (g/100g solvent)	
	TEPIC-S	TEPIC-L
MEK	2.0	10.6
Ethyl acetate	1.5	7.2
PGME	1.6	2.5
PGMEA	2.2	5.2

40°C

Solvent	Solubility (g/100g solvent)	
	TEPIC-S	TEPIC-L
MEK	6.8	19.6
Ethyl acetate	4.6	12.5
PGME	2.9	5.2
PGMEA	4.0	8.8

Solubility of TEPIC-HP

TEPIC-HP is a latent hardener with a high melting point and high dispersibility.

20°C

Solvent	Solubility (g/100g solvent)	
	TEPIC-S	TEPIC-L
MEK	1.1	0.3
DMF	6.4	1.8