

# Niutang Triglycidyl Isocyanurate (TGIC)

FORMULA: C<sub>12</sub>H<sub>15</sub>N<sub>3</sub>O<sub>6</sub> MOLECULAR WEIGHT: 297.0

FLASHPOINT: 170°C CHEMICAL NAME: Tris (2,3-Epoxypropyl) Isocyanurate

#### **DESCRIPTION:**

Triglycidyl Isocyanurate (TGIC) is a highly stable epoxy resin. It is a white powder or granule with no discernible odor at room temperature. TGIC is slightly soluble in water (0.1%), and soluble in methanol (7%), toluene (3%) and isopropanol (1%). It reacts rapidly with primary and secondary amines, carboxylic acids and anhydrides, thiols, phenols, and alcohols. It can be polymerized with catalysts and may undergo intense autopolymerization.

## **CHARACTERISTICS/ SPECIFIC APPLICATIONS:**

Test Item	Specification	Test Method or Reference	
TGIC-G	Low UV Absorption	Outdoor Polyester Powder	
TGIC-P	High Heat Resistant	Coating	
	Chemical Resistant	Plastics, Rubber, Adhesives	
TGIC-D	Low UV Absorption	Encapsulate (LED, CCD)	
	High Heat Resistant	Solder Resistant Ink	
	Low Chlorine Level Inhibits		
	Deterioration and Electrolytic		
	Corrosion		

### **OTHER APPLICATIONS:**

Curing agent for polyester powder coatings Ingredient for:

**Electrical Insulation Materials** 

Laminated Sheets Printed Circuits

Tools Adhesives

Stabilizer For Plastics



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### **PACKAGING:**

25-kg plastic bags or as otherwise agreed upon.

### **SHIPPING & HANDLING:**

Low humidity conditions are recommended to minimize caking/degradation potentials. Keep container tightly closed and inner bag sealed.

### STORAGE:

TGIC should be stored in a low humidity ambient environment.

#### SHELF LIFE:

The shelf life of this material is 1 year from the date of manufacture if stored in low humidity conditions. Product should be reevaluated if it exceeds expiration date.

Test Item	TGIC-G	TGIC-P	TGIC-D
Appearance	White Granule	White Powder	White Powder
Melting Range (°C)	90 to 120	95 to 120	95 to 120
Epoxy Equivalent	< 110	<110	< 105
Viscosity at 120° C	< 100 cp	< 100 cp	< 100 cp
Chlorine Content	< 1.5%	< 1.5%	< 0.12%
Volatile Matter	< 1.0%	< 1.0%	< 1.0%
Epichlorohydrin	< 50 ppm	< 50 ppm	< 50 ppm

## **LOT CODING:**

Example Lot: 070475

07 = Year Manufactured: 2007 04 = Month Manufacture: April 75 = Batch manufactured: #75

CAS Number: 2451-62-9