

# 4,4' Diamino Diphenyl Sulfone (Dapsone-Tech) Technical Data Sheet

### **Chemical Identity**

Chemical Name : 4,4'Diamino Diphenyl Sulfone

Synonyms : Dapsone, DDS, DADPS, 4,4' Sulfonyldianiline

CAS NO. : 80-08-0 EINECS : 2012484 Molecular Weight : 248.31

Empirical Formula:  $C_{12}H_{12}N_2O_2S$ 

# Physical and Chemical Properties

Appearance : White Crystalline Powder

Odor : Odorless Purity : Min. 99.5%

Density : Apparent Density at 20°C is appx. 300 Kg/m³ (DIN 53466)

pH (10g/l) at 20°C : 5.5 to 7.5

Solubility : Exceedingly soluble in Alcohol, Acetone and MEK

Test Description	Test Method	Unit Of Measure	Normal Value
Melting Range	BP 93	$^{\circ}\mathrm{C}$	176 to179
Ash Content	BP 93	%	<0.1
Moisture	BP 93	%	<0.1
Assay (Dry Basis)	BP 93	%	99 to 100
Particle Size Analysis	Sympatec HELOS (H0899)	μm	1.80 to 350



#### Description

Dapsone-Tech is an aromatic hardener for di-glycidyl or tetra glycidyl ether resins which initiates resin homopolymerization at elevated temperature. Generally, following proportion of constituents are used for casting applications:

Di-glycidyl Ether Resin 100 parts by Wt. Dapsone Tech 36 parts by Wt.

BF<sub>3</sub>MEA 0.5 - 1.0 parts by Wt.

Depending upon end use of the resin matrix achieved, various combinations of these constituents by weight can be used to get the desired results. High  $T_g$  and HDT also can be achieved by using tetra glycidyl ether resin with 44 parts by weight of Dapsone-Tech and without the use of accelerator. Post cure heating at higher temperature also helps.

### **Applications**

Glycidyl ether resin system cured with Dapsone-Tech imparts excellent thermal, electrical, mechanical and chemical properties to cured resin matrix. Hence, Dapsone-Tech is widely used in manufacture of

-Adhesives -Castings

-Printed circuit Boards -High Temperature laminates

-Prepegs -Advanced Composites

-High Performance Coatings

## **Packing**

Dapsone-Tech is packed in double poly liner HDPE bags, each weighing 25 Kg net. Each pallet consists of 20 bags (500 Kg net wt.).

### Handling and Storage

Avoid dust formation and ensure good ventilation-suction in the workplace. Protect against electrostatic charges. Store in a cool and dry environment, well-sealed.

Please refer to Material Safety Data Sheet for information on safety and toxicity.