YASIL-GM200

[INTRODUCTION]

YASIL-GM200 is an epoxy functional silane oligomer that may be considered for use as an adhesion promoter or binder in polysulfide, urethane, epoxy and acrylic caulks, sealants, adhesives and coatings. The product is a polyfunctional structure bearing gamma-glycidoxy groups, which is an excellent candidate to consider to reduce emissions of methanol upon hydrolysis of the material as compared with monomeric epoxy silanes. It typically aids adhesion promotion and crosslinking of water borne or solvent based coatings as well as dispersion of metallic pigments in water borne systems.

[CHEMICAL CHARACTERIZATION (SUBSTANCE)]

CAS No.	Chemical characteristics
-	Organosilane

[SPECIFICATIONS]

Item	Specification
Appearance	Colorless or light yellow transparent liquid
Epoxy value (mmol/g)	4.50-5.20
Density at 25℃, g/cm^3	1.1100-1.2000
Refractive index, n_D^{25}	1.4400-1.4600
Viscosity, 25℃, mPa.s	30-59
Chroma (Pt-Co)	≤300

[KEY FEATURES AND BENEFITS]

The gamma-glycidoxy propyl epoxide ring available in YASIL-GM200 can react with many different organic functionalities, while the alkoxy silane groups still available on the oligomeric structure typically bond strongly to inorganic substrates. The organophilic epoxy group can undergo a ring-opening reaction with nucleophiles such as alcohols and amines.An acidic or basic catalyst may be required. Examples of suitable inorganic substrates are glass, glass fibers, quartz, cristobalite and metals. It may be used with such polymers as epoxy, phenolic, polyurethanes, polysulfides, PVAC, acrylates.

The hydrolytic stability of YASIL-GM200 can help provide better shelf life than normal

monomeric silanes, thus providing better durability in solvent borne systems. Specific hydrolysis conditions can be applied to hydrolyze the material so YASIL-GM200 may be considered for use in waterborne systems.

[DELIVERY & PACKAGE]

YASIL-GM200 is delivered in 200Kg drum.

[SAFETY]

Precautions for safe handling:
Ensure adequate ventilation. Keep away from incompatible substances, such as moisture. Spilled substance increases risk of slipping.
Precautions against fire and explosion:
Product can separate methanol. Flammable vapors may accumulate and form explosive mixtures with air in containers, process vessels, including partial, empty and unclean containers and vessels, or other enclosed spaces. Keep away from sources of ignition and do not smoke. Take precautionary measures against electrostatic charging. Cool endangered containers with water.

[STORAGE]

Protect against moisture. Store in original container only. Keep container tightly closed and store in a cool, well ventilated place.
The recommended shelf life is 12 months.