

バイオベース エポキシ・反応性希釈剤

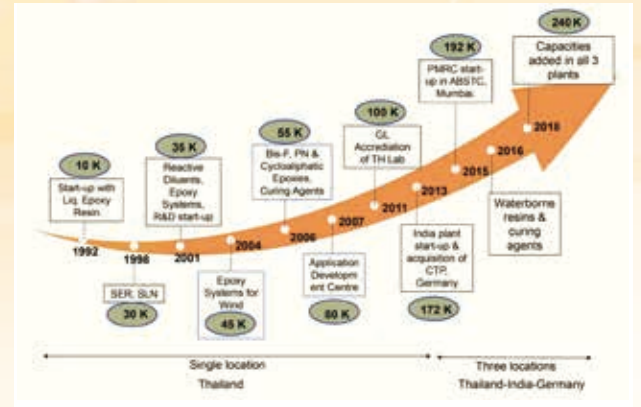
Aditya Birla Chemicals社 BRIOZEN BIO-SOURCE EPOXY

Aditya Birla Chemicals社(タイ)

Aditya Birla Group(印_売上高4兆円規模)を親会社にもつエポキシメーカーです。1992年に旧東都化成とのJV(技術継承)から事業をスタートさせ、高い競争力から販売数量・製造キャパシティを順調に拡大、グローバルNo.1サプライヤーを目指しております。



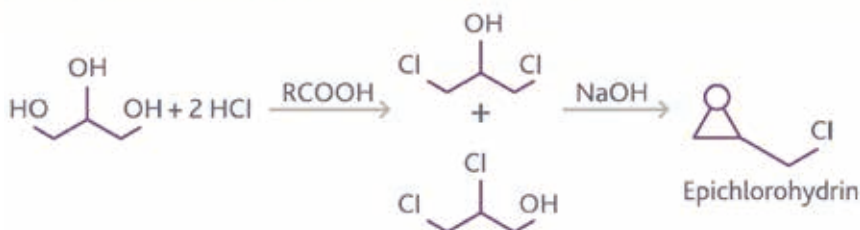
Thailand Plant (Rayong)



BRIOZEN(BIO-SOURCE Epoxy & Reactive Diluent)

エポキシ樹脂はBis-Phenol A(Bis-A) + Epichlorohydrin(ECH)が原料です。BRIOZENシリーズは、植物油由来のGlycerolから作られたECHを原料とすることで、カーボンニュートラルに貢献致します。

Bio-based synthesis of Epichlorohydrin USES GLYCEROL, A RENEWABLE NATURAL RESOURCE



※通常、ECHは石油由来のPropyleneから合成

Bio-based Carbon Content*

*ASTM D 6866 radiocarbon analysis(放射性炭素分析)

Bio-based epoxy : **25-30%**
Reactive diluent : **max.100%****

**depending on the base alcohol

Bio-Source Series : Epoxy Resins

Grade & Type	Bio Content (%) Theoretical	EEW (g/eq)	Viscosity (mPa-s@25°C)	Color (Gardner)	Features & Benefits
Briozen YD 128 G Standard liquid epoxy resin	28	185-194	11000-14000	0.5 max	Standard liquid epoxy resin for ambient & elevated cure application.
Briozen YD 127 G Lower viscosity standard liquid epoxy resin	28	180-188	9000-12000	0.5 max	Lower viscosity than Epotec YD 128 & hence preferred where lower viscosity is required in processing & application.
Briozen YDF 170 LC G Lower viscosity Bis-F based epoxy resin	30	165-175	3000-5000	1 max	Improved crystallization resistance relative to Epotec YDF 170.
Briozen YDF 173 G Liquid novolac epoxy resin	30	167-175	11000-15000	1 max	Functionality of 2.5 for improved chemical resistance; used in linings for storage tanks, pipelines, etc.
Briozen YDPN 638 G Multi-functional semi-solid phenol novolac epoxy resin	30	175-182	20000-50000#	1 max	Functionality of 3.6 for improved chemical resistance; used in linings for storage tanks, pipelines, etc.

* Test report according to ASTM 6866-12(098) available upon your request
mPa-s @ 52°C

Bio-Source Series : Reactive Modifiers

Grade & Type	Bio Content (%) Theoretical	Bio-Based Source	EEW (g/eq)	Viscosity (mPa-s@25°C)	Features & Benefits
Briozen RD 108 G Monoglycidyl Ether of C ₁₂ -C ₁₄ alcohol	100	Palm oil	275 - 300	5-10	Good diluent and morphology, improved impact strength
Briozen RD 124 G Triglycidyl Ether of castor oil	100	Castor oil	500 - 650	250 - 500	Imparts flexibility and impact resistance. Low odor & non-volatile
Briozen RD 131 G Triglycidyl Ether of polyglycerol	100	Palm oil	160 - 180	1000 - 1360	Tri-functional reactive diluent : adhesion promoter
Briozen RD 133 G Diglycidyl Ester of dimer acid	100	Tall oil, Canola oil, Cotton-Seed oil	390 - 470	400 - 900	Low viscosity flexibilizer, improves toughness
Briozen RD 135 G Diglycidyl Ether of isosorbide	100	Corn Starch/ Potato Starch	145 - 160	500 - 1500	Di-functional reactive diluent ; used for coatings
Briozen RD 143 G Polyglycidyl Ether of sorbitol	100	Corn Starch/ Potato Starch	160-195	8000-18000	Poly-functional : used as additive as accelerator with other epoxy resin used for coatings
Briozen RD 144 G Polyglycidyl Ether of sorbitol	90	Corn Starch/ Potato Starch	159-192	5000-8000	Poly-functional : water soluble, used for coatings

* Test report according to ASTM 6866-12(098) available upon your request

