

*Shaping Tomorrow
with Cutting-Edge
Polyol Innovations*



POLYOLS TECHNOLOGIES (P) LTD

Polyolstechnologies Private Limited (a group of Polytek Synergy Ltd.) established in 2014 and specializes in the production of Polyester polyol which is supporting for the footwear and rigid polyurethane industry.

ADDRESS

A1/8, Paschim Vihar,
New Delhi - 110063, India

ONLINE

info@polyteksynergy.com
www.polyteksynergy.com

CONTACT NO.

+91 93 19 00 8250

Revolutionizing Industries with Advanced Polyol Technologies
ALIPHATIC POLYOLS | AROMATIC POLYOLS | BIO POLYOLS | RECYCLED POLYOLS

www.polyolstechnologies.com

About OUR COMPANY

Polyolstechnologies Private Limited (a group of Polytek Synergy Ltd.) established in 2014 and specializes in the production of Polyester polyol which is supporting for the footwear and rigid polyurethane industry. By seeing the growth of polyurethane industry for various application filed like Coating, Adhesives and elastomers, PTPL has decided to integrate with a plant for the product of AROMATIC and ALIPHATIC Polyester resins, Performance based rigid foam, flexible package adhesives and sealants are designed according to the market needs and produced with the guarantee of a consolidated experience. The flagship of PTPL is the latest generation laboratories, thanks to which we follow the entire production process, from design to testing.

Plant Infrastructure

The Plant is totally automatic PLC controlled and provides its own utility of captive power, N2 Plant, thermo pack heater with economizer. The quality assurance system consist state of the art equipment for the testing of chemical physical, mechanical and thermal properties of liquid resins, cast resins and laminates. The Laboratory equipment consists of computerized testing Machine and digital Brook field viscometer apparatus, Metrohm Hydroxyl value Analyser, IR spectrophotometer, and Electronic weighing machine with wet analysis Kit. The plant production capacity is 10,000MT per annum and we cover major product lines manufactured in separate reactor and blended equipments. The manufacturing strength is supported by a well maintained supply chain for input.

Polyolstechnologies aim is to improve the technology and equipment quality and stability of products depend highly on responsive process assurance and control. PTPL have all equipment to ensure that all the products are manufactured with utmost care and controlled process conditions.

STANDARDS

PTPL Polyol resins are custom made and confirming to internationally accepted standards like IS, BS and ASTM.



QUALITY ASSURANCE & LABORATORY

Our quality assurance begins from the raw materials, testing for compliance with manufacturer's standards. Materials are received and checked again in the laboratory for their physical as well as chemical properties. PTPL

Laboratory has proficient instruments to examine our products characteristics like Hydroxyl Value, Colour index, Dynamic Viscosity, Refractive Index, Hydrometer, Boiling Point, Melting Point and so on. Polyurethane application test being carried out in order to ensure our saturated polyester polyol final properties with respect to customer service.

TECHNOL BIO BASED POLYOLS FOR VERSATILE POLYURETHANE APPLICATION

TECHNOL BIO RENEWABLE SOURCE polyols developed for the manufacturing of Green polyurethane application. It's unique characteristics include : Engineered for performance/versatile chemical structure/ Good reactivity and cost effective replacement. It brings an advantage include good adhesion, excellent workability and good weathering properties. Also, it offers excellent hydrolysis, chemical and UV resistance as well as low viscosity



Technol Grades	Insulation	Automotive	Footwear	CASE	BIO-Based content%	Description and Recommended Applicatio	Hydroxyl No., mg KOH/g	Viscosity @ 25 °C, cps	Acid No, mg KOH/g	Functionality
7310	*			*	25-35	Rigid insulation foam with good fire Retartdent nature	310	2500	2.5	2.1
8206	*			*	60-80	High bio content polyol with high functional polyol for Rigid and Adhesive application	430	4500	< 1.0	4.5
6209	*				40-60	High functional water blown polyurethane insulation foam	250	4500	< 1.0	4
54BPO		*	*	*	70-90	3000 Mw polyol for conventional slabstock and footwear segment	56	9500	< 1.0	3
150BPO		*		*	60-80	1200 Mw polyol for memory and flexible PU foam	150	1500	< 1.0	3
250BPO		*		*	50-70	700 Mw polyol for memory foam and PU adhesive application	250	1000	< 1.0	3
SEPA-57		*	*		30-60	Low fogging characteristic polyol for automotive application	60	18000	≤ 1.5	2.7
3083SBP		*	*	*	60-80	Universal Polyol for excellent impact resistance.	170	2100		
3140SBP				*	60-80	Universal polyol for Adhesive	210	1000	< 1.0	2.7

Technol Aliphatic Polyols

In Polyurethane Application Segment, TECHNOL Aliphatic polyester polyols are mainly used in order to improve elastomeric properties in the molecular structure. The application areas covered by TECHNOL Aliphatic saturated polyesters are : Flexible Slabstock Foams, Integral Skin Foam, Microcellular elastomers, Thermoplastic polyurethane(TPU), Synthetic leather, Polyurethane dispersion coating, Adhesives and Sealants.



TECHNOL AROMATIC POLYESTER POLYOLS

In Polyurethane Application Segment, TECHNOL Aliphatic polyester polyols are mainly used in order to improve elastomeric properties in the molecular structure. The application areas covered by TECHNOL Aliphatic saturated polyesters are : Flexible Slabstock Foams, Integral Skin Foam, Microcellular elastomers, Thermoplastic polyurethane(TPU), Synthetic leather, Polyurethane dispersion coating, Adhesives and Sealants.



Technol Grades	Adhesives	Synthetic Leather	Microcellular Foams	Flexible Foams	TPU	Coatings	PU Dispersion	Hydroxyl No., Mg Koh/g	Acid Value, Mg Koh/g	Viscosity in CPS	Average MW	Key Applications
2255			•					55-59	≤ 1.0	35°C/4200-5000	2000	Footwear
2250			•					50-55	< 0.8	35°C/4500-5500	2150	Footwear
3272	•		•					70-75	< 0.8	35°C/2000-4000	1550	Low density high hardness footwear sandal
1255B		•	•		•			54-58	< 0.5	50°C/2000-2500	2050	TPU Resins & Footwear
3255B		•	•		•			54-58	< 1.0	35°C/6000-7000	2000	Medium hydrolysis Improved performance of TPU Resins & Footwear
3160R				•				58-63	< 1.50	25°C/16000-19000	2500	Flexible foam
3160RLF				•				58-63	< 1.50	35°C/8500-10000	2500	Low Fogging characteristics Flexible foam
3160			•	•				58-63	< 1.60	25°C/19000-24000	2580	Footwear, Flexible foam & Hot Cast Elastomer
2245T			•					44-48	< 1.0	35°C/6800-7800	2600	Footwear
2265T			•					64-68	< 1.0	35°C/4000-4600	2000	Footwear
1165DB			•					60-68	< 1.0	35°C/9400-12000	2010	Footwear
4050T			•					54-58	< 1.0	35°C/7600-8600	2100	Footwear
3255AX				•				50-58	< 1.80	35°C/9500-11000	2700	Improved Anti scorching for Flexible slab-stock foam
4255AX				•				50-58	< 1.0	25°C/14000-16000	3000	Improved hydrolysis and anti scorching version for Flexible slab-stock foam
6182AX				•				80-85	< 1.0	25°C/6500-8500	2000	Improved hydrolysis and anti scorching version for Flexible slab-stock foam
3196AX				•				195-215	< 4.0	25°C/18500-27500	830	Flexible slab stock foam
8175				•				160-180	< 0.8	25°C/2500-4500	660	Flexible slab stock foam flame lamination
2120B	•	•			•			108-116	< 0.5	75°C/100-300	1000	TPU Resins
2156B	•	•			•			50-55	< 0.5	60°C/1350-1650	2250	TPU Resins
2140B	•	•			•			38-42	< 0.5	60°C/2700-3300	2800	Adhesives and TPU
1156		•		•				54-58	≤ 1.0	75°C/500-700	2000	TPU, synthetic leather
4055		•		•				54-58	< 0.7	35°C/2900-3600	2000	Footwear
4055NP	•					•		55-60	< 0.5	35°C/1500-3500	2000	CASE , Dispersions, UV stable
4256NH	•					•		53-57	< 0.5	60°C/6000-8000	2000	Coatings, adhesives and PUD
4310NH	•					•		106-118	< 1.0	75°C/500-800	1200	Coatings, adhesives and PUD
5255MPD	•					•		55-60	< 1.0	35°C/2500-400	2000	Excellent hydrolysis in Coatings, adhesives and PUD & micro cellular
5255PO	•					•		55-60	< 1.0	35°C/7000-8000	2000	Excellent hydrolysis in Coatings, adhesives & PUD and micro cellular
6113	•				•	•		55-60	< 1.0	35°C/7000-8000	2000	Medium hydrolysis in Coatings, adhesives and Water based PUD
2120-55	•		•	•				50-60	< 1.5	75°C/800-1200	2050	CASE

Technol Grades	Appliance	Spray	Discontinuous technology sandwich Panel & Block	Continuous technology laminating Panel & Block	O.C.F	PUR	Key Performance	Hydroxyl No., Mg Koh/g	Viscosity @ 25°C, CPS	Acid No, mg KOH/g	Functionality	Average MW
8315	•	•		•		•	General Rigid Foam, Good Thermal efficiency	310	2600	2.4	2	360
9360			•	•		•	High mechanical and good Fire performance in PIR Low-Index and PUR	360	9000	< 1.0	2.4	375
9350		•	•	•		•	High mechanical and good Fire performance in PIR Low-Index and PUR	350	3000	< 1.0	2.5	400
8235	•			•		•	Promotes good flow, compatability with HFC and HC	235	3000	< 1.0	2	480
8241	•			•		•	Good thermal efficiency, improves green strength and compatability with HC and HFC	240	3000	< 2.5	2	470
8245			•	•		•	High Fire performance at medium-high index PIR	245	11000	< 1.5	2	460
9240TA		•		•		•	High Fire performance continuous technology PIR foam, Improves Adhesion	240	8500	≤ 1.5	2.3	540
8250TA		•	•	•			High Fire performance at Medium -High index PIR foam, Good temperature resistance	240	4000	< 1.0	2	470
9250		•		•		•	Both 1K & 2K foam meeting DIN 4102 B1	250	5500	< 1.0	2	450
8190K						•	1K foam Meeting DIN 4102 B2	190	3000	< 1.5	2	590
8175				•			PIR metal panel and flexible slabstock for textile bonding	170	3000	< 0.8	2	660
8235TA		•	•	•		•	High Fire Performance and good Compatability with HC and HFC	235	3500	< 1.0	2	480
7310	•	•	•	•		•	Promotes Good Flow, High Fire performance and good Compatability with versatile physical Blowing Agent	315	2200	< 2.0	2	356
9285		•	•	•			Sandwich panel and Block by DISCO panel lamination in PIR Technology	300	5000	< 1.0	2.3	430
9300		•		•		•	ASTM E-84 class meet Polyset in spray and Continuous PIR board stock Application.	300	5500	< 1.0	2	375
9235	•		•	•		•	Sandwich panel and Block by DISCO panel lamination Technology IN PIR Technology	240	9500	< 1.0	2.7	640
BR-300	•		•	•		•	Brominated Polyester polyol	300	9500	< 1.0	3	560
2350			•	•		•	Good mechanical properties nad good Fire Performance in PUR Hybrid	350	5500	< 1.0	3	480
7350			•	•		•	Good mechanical properties and good Fire performance in PUR Hybrid	350	5000	< 1.5	2.2	352
F270CO		•	•	•		•	Excellent adhesion and reduce friability in high water blown PUR and PIR foam	270	450	< 1.5		
2190AP		•	•	•		•	Viscosity reducer and adhesion promoter	190	1000	≤ 1.0	2.1	620