



Color & Comfort



PRODUCT GUIDE

COATING RESINS 2024

India, Middle East, and Africa

DIC Corporation

We are a fine chemicals company that works to bring people “Color & Comfort”

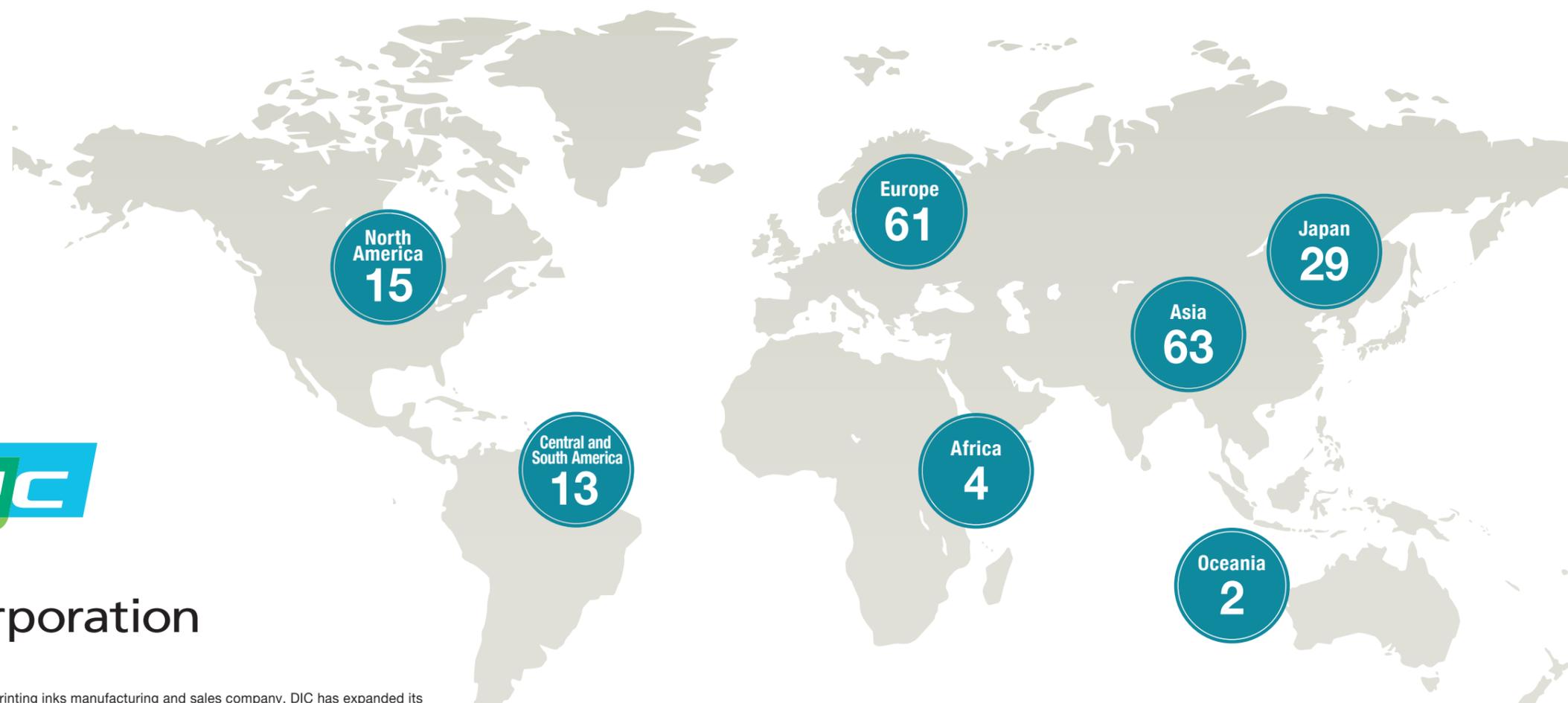


DIC Corporation

Established in 1908 as a printing inks manufacturing and sales company, DIC has expanded its mainstay organic pigments and synthetic resins businesses while at the same time cultivating world-class related core technologies. Since then, DIC has leveraged these technologies to build a broad portfolio encompassing materials and finished products. This has enabled it to respond to market needs by providing customers in the automotive, electronics, food packaging, housing and other industries with solutions that bring “color” and “comfort” to people’s lives.

Looking ahead, DIC—today a multinational corporate group with operations in more than 60 countries and territories—will redouble its efforts to contribute to environmental protection and to the realization of a safe and sustainable society.

Corporate data		(As of December 31, 2022)
Company name	: DIC Corporation	
Headquarters	: DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan	
Date of foundation	: February 15, 1908	
Paid-in capital	: ¥96.6 billion	
Number of employees	: Consolidated 22,743, Non-consolidated 3,744	
Number of subsidiaries and affiliates	: 190 (Domestic:30, Overseas:160)	



Top share of key global markets

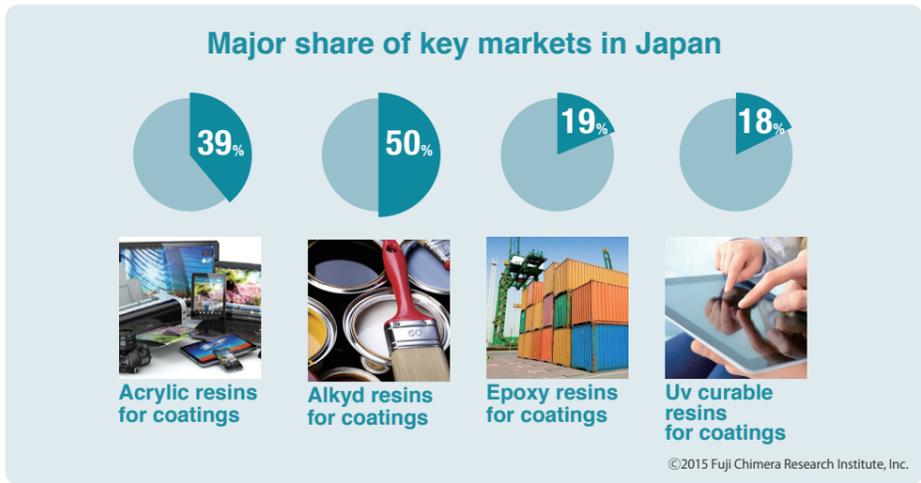
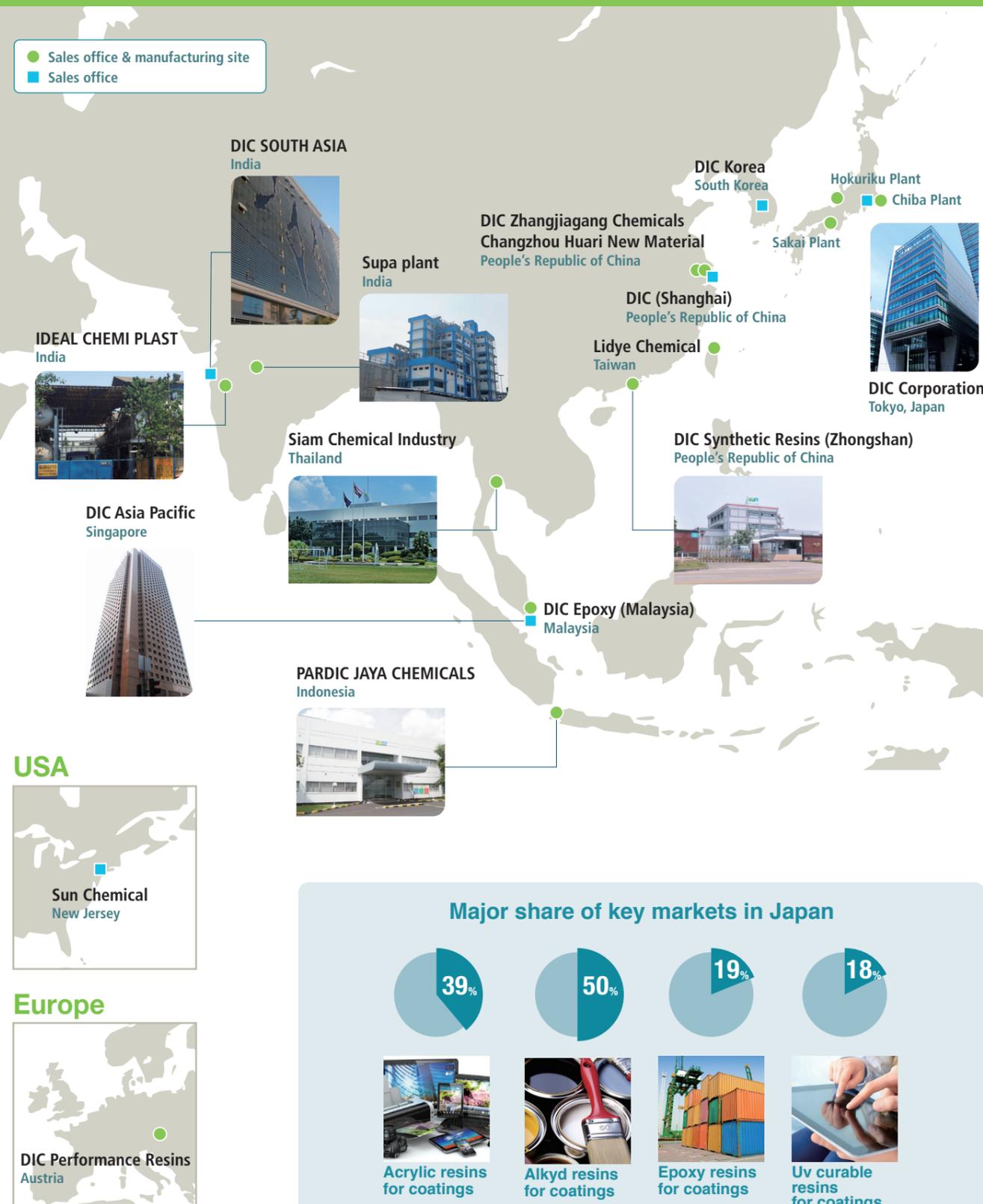
DIC’s printing inks, organic pigments, PPS compounds and other products are used in a wide range of industries in markets around the world.



Business development

Through new three business groups which reorganized focusing value provided, the DIC Group works to provide products that respond to the needs of society and its customers.

Packaging & Graphic	Color & Display	Functional Products
<p>Packaging materials that bring safety and peace of mind</p>	<p>Color and display materials that make life colorful</p>	<p>Functional products that add comfort</p>
<p>Printing Material Products Division Packaging inks, Jet inks, etc.</p> <p>Packaging Material Products Division Polystyrene, Multilayer films, etc.</p>	<p>Color Material Products Division Functional pigments, Natural colorants, etc.</p> <p>Display Material Products Division Liquid crystal materials, etc.</p>	<p>Performance Material Products Division Waterborne and UV-curable resins, Resins for electronics, etc.</p> <p>Composite Material Products Division Compounds and industrial adhesive tapes for automotive application, Hollow-fiber membrane modules, etc.</p>



Automotive refinishing

P05

- Acrylic resins
- Unsaturated polyester resins (UPR)
- Polyester resins
- Epoxy ester resins
- Alkyd resins

Thermosetting metal coatings

P07

- Polyester resins
- Amino resins
- Acrylic resins
- Powder resins
- Alkyd resins

Protective coatings

P11

- Acrylic resins
- Waterborne epoxy & epoxy ester resins
- Epoxy resins
- Epoxy ester resins
- Polyamide resins
- Silicone modified resins
- Organic-inorganic hybrid resins
- Alkyd resins
- Waterborne alkyd resins

Plastic & glass coatings

P15

- Acrylic resins
- Olefin modified acrylic resins
- Alkyd resins

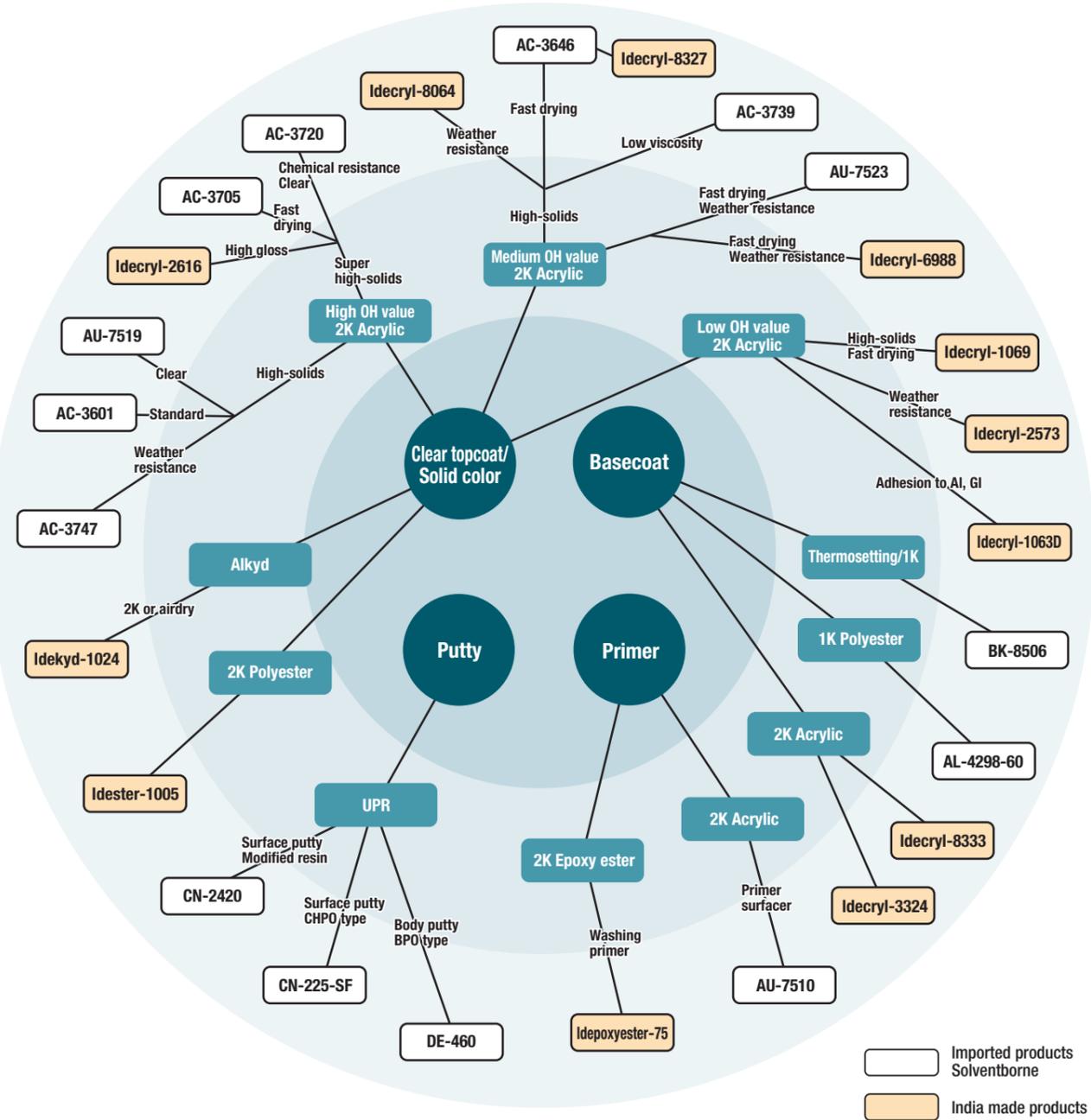
Wood coatings

P17

- Acrylic resins
- Alkyd resins
- Unsaturated polyester resins (UPR)
- Polyester resins
- Polyurethane resins



Product tree for automotive refinishing



Product characteristics for automotive refinishing

Clear topcoat/ Solid color

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Oil length	Type of oil	Color, Gardner	Features
High OH value 2K Acrylic	ACRYDIC AC-3747	n-Butyl acetate	69.0 - 71.0	Z2 - Z5	145 - 155	4.4 - 4.7	0 - 7.9*	-	-	1 max.	High gloss, pigment dispersibility, chemical resistance
	ACRYDIC AC-3601	n-Butyl acetate	69.0 - 71.0	Z2 - Z4	154 - 166*	4.7 - 5.0	4 - 10*	-	-	1 max.	High gloss, hardness, chemical resistance, fast drying
	ACRYDIC AU-7519	Xylene, n-Butyl acetate	69.0 - 71.0	Z2 - Z4	145 - 155	4.4 - 4.7	4 - 10*	-	-	1 max.	High gloss, hardness, chemical resistance, cost effective
	Idecryl-2616	Xylene, n-Butyl acetate	72.5 - 75.5	Z3 - Z4	150	4.5*	5 - 8	-	-	1 max.	High gloss (DOI), gasoline resistance
	ACRYDIC AC-3705	n-Butyl acetate	74.0 - 76.0	Z4 - Z6	145 - 155	4.4 - 4.7	6 max.*	-	-	1 max.	Super high-solids, chemical resistance
	ACRYDIC AC-3720	n-Butyl acetate	79.0 - 81.0	Z3 - Z5	145 - 155	4.4 - 4.7	5 - 12*	-	-	1 max.	Super high-solids, high gloss (DOI)
Medium OH value 2K Acrylic	Idecryl-8064	Xylene	68.0 - 72.0	48 - 58 (Seconds, 30°C, Ford cup #4, 77% solution in Butyl acetate)	95 - 105	2.9 - 3.2*	5 max.	-	-	1 max.	High gloss, weather resistance
	ACRYDIC AC-3646	n-Butyl acetate	69.0 - 71.0	Z3 - Z6	90 - 100	2.7 - 3.0	5 max.*	-	-	1 max.	Fast drying, high gloss, adhesion
	Idecryl-8327	Xylene, n-Butyl acetate	68.0 - 72.0	98 - 148 (Poises)	95 - 105	2.9 - 3.2	8 max.*	-	-	1 max.	High gloss, adhesion to metal, gasoline resistance
	ACRYDIC AC-3739	n-Butyl acetate	69.0 - 71.0	W - Z	85 - 95	2.5 - 2.9	5.7 max.*	-	-	1 max.	Fast drying, high gloss, low viscosity
	ACRYDIC AU-7523	Xylene	59.0 - 61.0	Z - Z3	85 - 95	2.5 - 2.9	6.7 max.*	-	-	1 max.	Fast drying, high gloss
	Idecryl-6988	Cellosolve acetate, Xylene	58.0 - 62.0	Z1 - Z3	75 - 85	2.3 - 2.8*	5 max.	-	-	1 max.	Fast drying, weather resistance
Low OH value 2K Acrylic	Idecryl-1069	Xylene	58.0 - 62.0	Z1 - Z2	70 - 75	2.1 - 2.3*	8 max.	-	-	1 max.	Fast drying
	Idecryl-2573	Xylene	68.0 - 72.0	Z3 - Z4	68 - 72	2.1 - 2.2*	8 max.	-	-	1 max.	Weather resistance
	Idecryl-1063D	Xylene	63.0 - 67.0	150 - 200 (Poises)	75 - 85	2.3 - 2.6*	12 max.	-	-	1 max.	Adhesion to aluminium and galvanized steel (GI)
2K Polyester	Idester-1005	Xylene	68.0 - 72.0	20 - 30 (Poises)	95 - 105	2.9 - 3.2*	10 max.	-	-	2 max.	High gloss, compatibility with CAB
Alkyd	Idekyd-1024	Xylene	58.5 - 61.5	Z1 - Z3	55 - 75	1.7 - 2.3*	10 max.	40	Soybean	6 max.	Fast drying, high gloss

* Calculated from solution value

Basecoat

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Color, Gardner	Features
Thermosetting	ACRYDIC BK-8506	Xylene, n-Butanol	64.0 - 66.0	Z5 - Z8	-	-	20 max.	1 max.	Compatibility with CAB, adhesion, aluminium orientation
1K Polyester	BECKOLITE AL-4298-60	Xylene, Propylene glycol methyl ether, Solvesso-100	59.0 - 61.0	V - X	75 - 85*	2.3 - 2.6*	3 - 10*	2 max.	Compatibility with CAB, adhesion, flexibility, aluminium orientation
2K Acrylic	Idecryl-8333	n-Butyl acetate	28.0 - 32.0	46 - 98 (Poises)	45 - 55	1.4 - 1.7*	6 max.	1 max.	Less CAB required
	Idecryl-3324	n-Butyl acetate	48.0 - 52.0	20 - 40 (Poises)	45 - 48	1.4 - 1.5*	6 max.	1 max.	Compatibility with CAB

* Calculated from solution value

Primer

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	EEO on solids, g/eq	Color, Gardner	Features
2K Acrylic	ACRYDIC AU-7510	n-Butyl acetate, Xylene	54.0 - 56.0	Z - (Z1 - Z2)	63 - 83	1.9 - 2.5	5.5 - 10.9*	-	1 max.	Adhesion to plastic and metals, fast drying, sandability
2K Epoxy ester	Idepoxyester-75	Xylene	73.0 - 77.0	46 - 148 (Poises)	80 - 90	2.4 - 2.7*	5 max.	625 - 775	10 max.	Adhesion to untreated metal surface

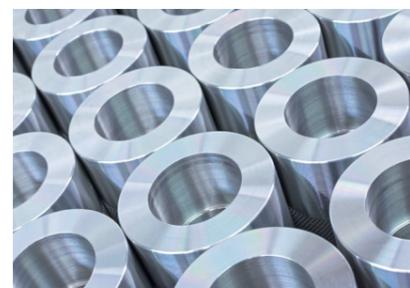
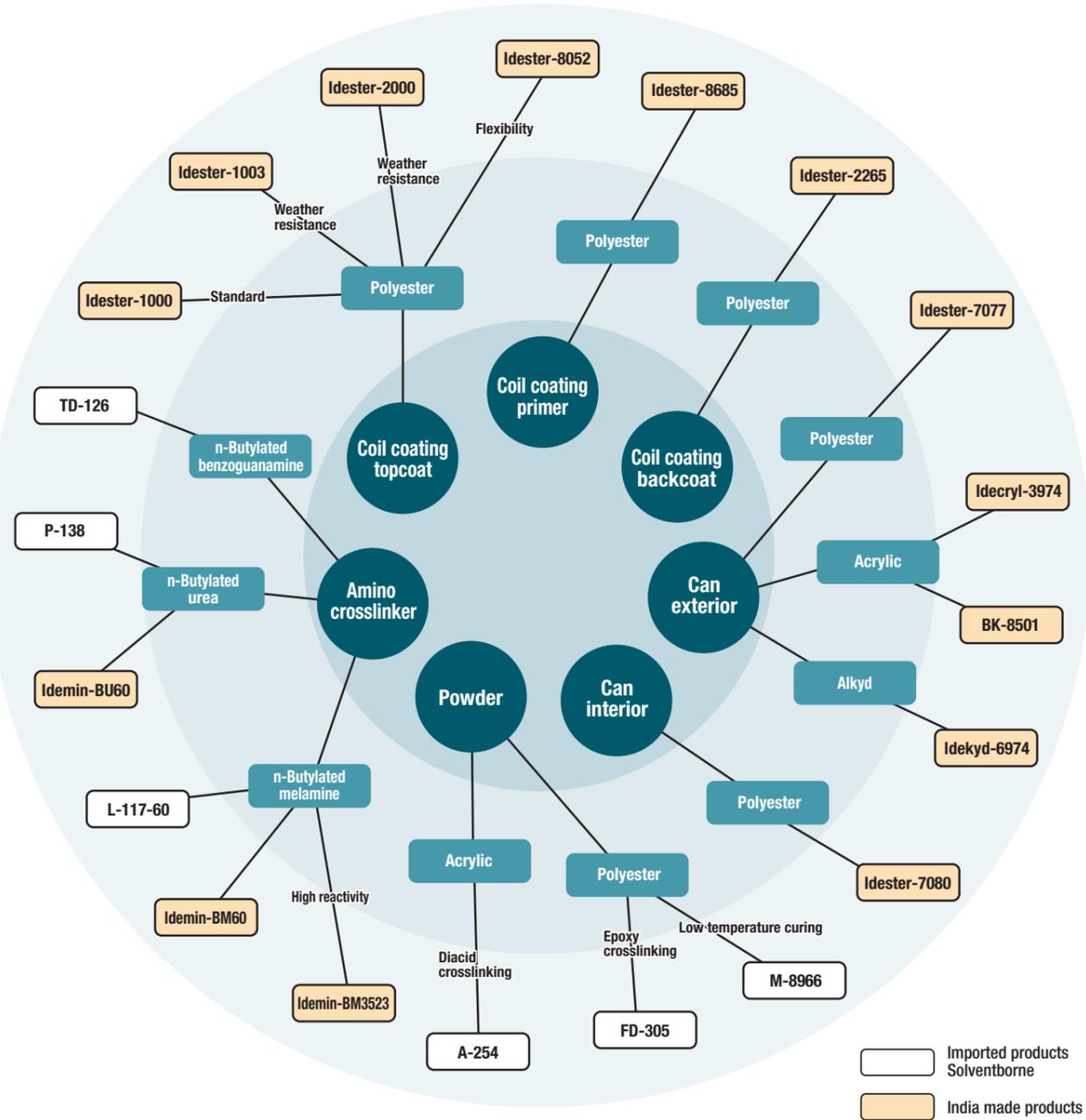
* Calculated from solution value

Putty

Type	Product name	Viscosity, Gardner	Gel time, minutes at 25°C	Gel time, methods at 25°C*	Features
UPR	SUNDHOMA DE-460	M - P	6.30 - 7.30	PGT - SF	Hardness, sandability, flexibility, adhesion
	SUNDHOMA CN-225-SF	M - P	12.00 - 18.00	PGT - SF	Fast drying, sandability, workability
	SUNDHOMA CN-2420	Q - S	10.00 - 16.00	PGT - SF	Adhesion to galvanized steel (GI) and aluminium, heat resistance



Product tree of thermosetting resins for metal coatings



Product characteristics of thermosetting resins for metal coatings

Coil coating topcoat

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	Acid value on solids, mgKOH/g	Color, Gardner	Features
Polyester	Idester-1000	Solvesso-150, Butyl cellosolve	58.0 - 62.0	Z - Z2	45 - 55	10 max.*	1 max.	General purpose
	Idester-1003	Solvent CX, Butyl cellosolve	63.0 - 67.0	X - Z	45 - 55	10 max.	1 max.	Weather resistance
	Idester-2000	Solvesso-150, Butyl cellosolve	63.0 - 67.0	Z - Z1	45 - 55	10 max.*	2 max.	Hydrolysis stability, weather resistance
	Idester-8052	Solvent CX, Butyl cellosolve	63.0 - 67.0	22 - 27 (Pois)	40 - 50	10 max.	2 max.	Flexibility, weather resistance

* Calculated from solution value

Coil coating primer

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	Acid value on solids, mgKOH/g	Color, Gardner	Features
Polyses	Idester-8685	Solvent CX, Butyl cellosolve	63.0 - 67.0	55 - 65 (seconds, 30°C, Fordcup B-4, 75% resin solution in Butyl cellosolve/Solvent CX 1:1)	25 - 35	5 max.*	2 max.	High solids

* Calculated from solution value

Coil coating backcoat

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	Acid value on solids, mgKOH/g	Color, Gardner	Features
Polyester	Idester-2265	Solvesso-150, Butyl cellosolve	63.0 - 67.0	X - Z	130 - 150	10 max.*	1 max.	Foam adhesion

* Calculated from solution value

Can exterior

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	Oil length	Type of oil	Color, Gardner	Features
Polyester	Idester-7077	Solvent CX	58.0 - 62.0	Z5 - Z6	10 max.	-	-	1 max.	Good tooling property, high gloss, Non-yellowing
Acrylic	Idecryl-3974	Butyl cellosolve	38.0 - 42.0	W - Y	80 - 90	-	-	1 max.	Hardness, high gloss
	ACRYDIC BK-8501	Solvesso-150, Butyl cellosolve	56.5 - 59.0	X - Z2	61 - 72	-	-	1 max.	Flexibility, adhesion, sterilization and solvent resistances
Alkyd	Idekyd-6974	Solvent CX	68.0 - 72.0	60 - 80 (seconds, 30°C, Ford cup B-4, 50% resin solution in Solvent CX)	15 max.	38	-	6 max.	Non-yellowing, high gloss

Can interior

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	Acid value on solids, mgKOH/g	Color, Gardner	Features
Polyester	Idester-7080	Butyl cellosolve, Solvent CX	63.0 - 67.0	Y - Z1	80 - 100	10 max.	2 max.	Can be a substitute of epoxy resin

Powder

Type	Product name	Function value	Unit	Softening point	Methods	Features
Polyester	FINEDIC M-8966	27.5 - 37.5	Acid value, mgKOH/g	110.8 - 114.8	Ring & Ball, °C	Low temperature curing, superdurable
	FINEDIC FD-305	30.0 - 36.0	Acid value, mgKOH/g	106 - 112	Ring & Ball, °C	Carboxy functional polyester, flow ability, impact resistance, corrosion resistance, storage stability as paint
Acrylic	FINEDIC A-254	515 - 555	EEW, g/eq	46 - 54	Melt Index at 125°C	Epoxy functional acrylic resin, high gloss, corrosion resistance

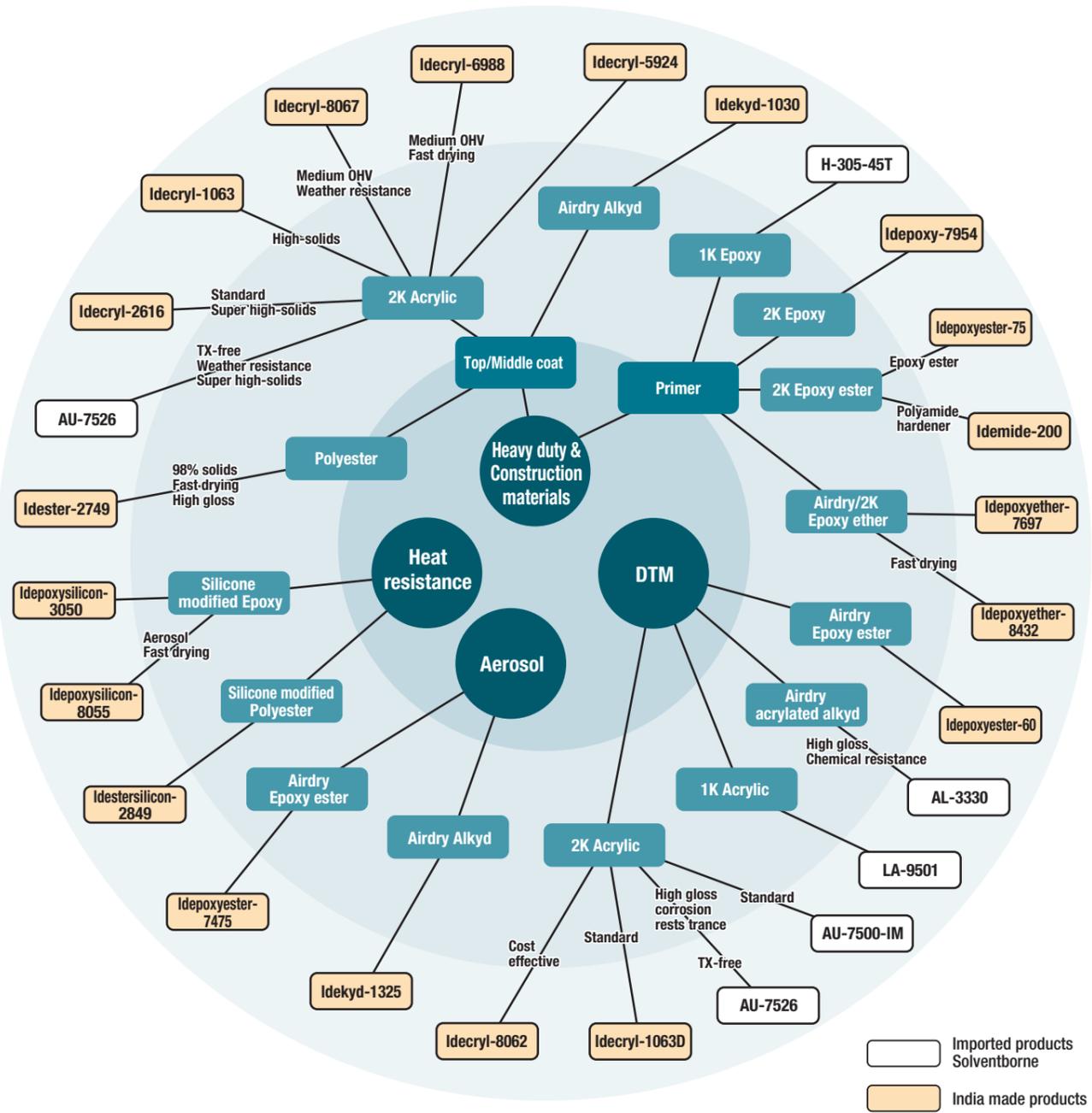
Product characteristics of thermosetting resins for metal coatings

Amino crosslinker

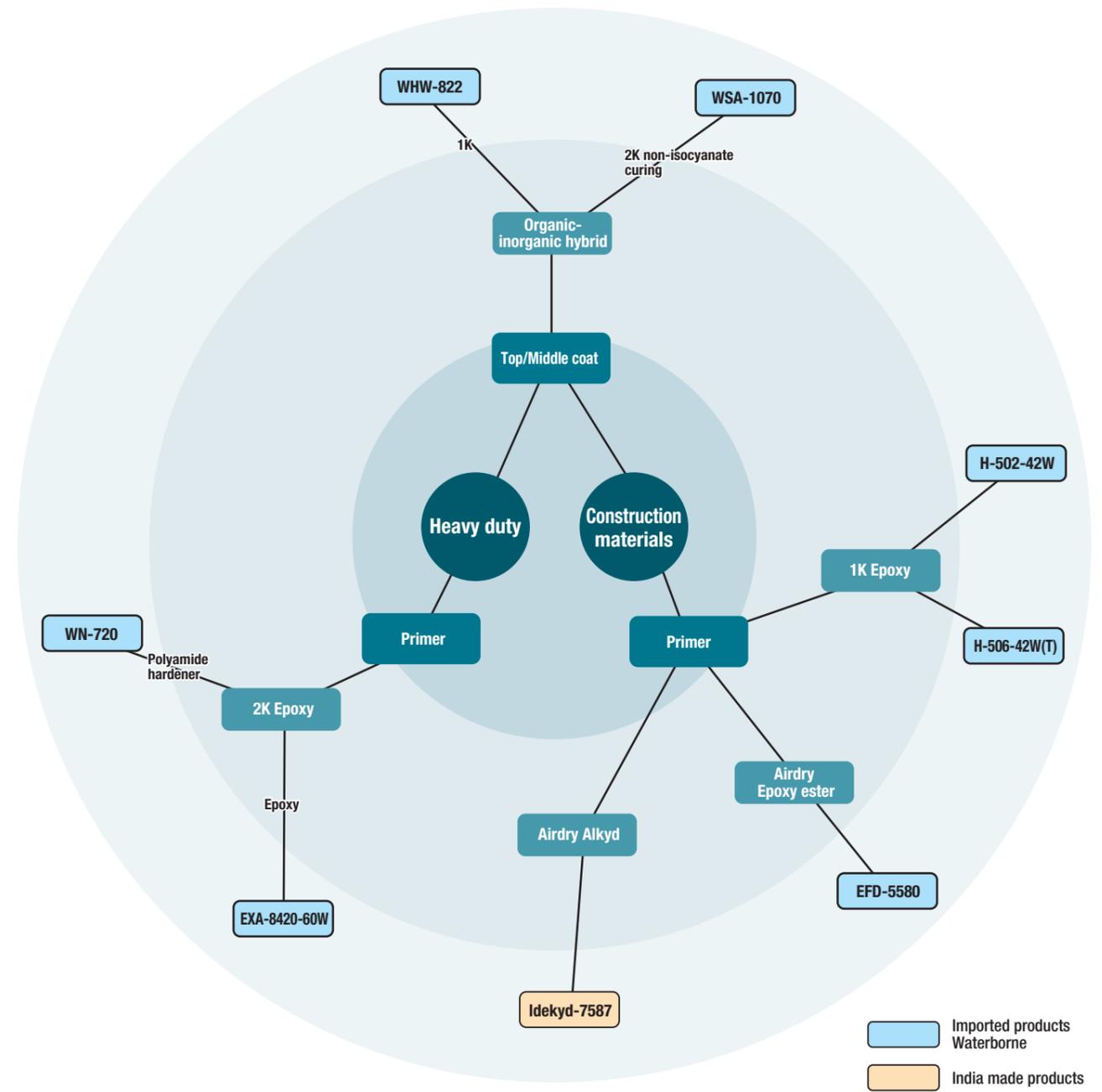
Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	Acid value on solids, mgKOH/g	Color, Gardner	Features
n-Butylated melamine	AMIDIR L-117-60	n-Butanol, Xylene	58.0 - 62.0	F - J	2 max.*	1 max.	Compatibility with acrylic resins
	Idemin-BM60	n-Butanol, Xylene	60.0 - 64.0	3 - 6 (Poises)	2 max.	1 max.	Compatibility with acrylic and polyester resins
	Idemin-BM3523	n-Butanol, Xylene	58.0 - 62.0	8 - 12 (Poises)	2 max.	1 max.	High reactivity
n-Butylated urea	AMIDIR P-138	Xylene, n-Butanol, Methanol, Ethanol	59.0 - 63.0	R - T	2 - 7*	1 max.	Compatibility with epoxy resins, low temperature curing
	Idemin-BU60	n-Butanol, Xylene	58.0 - 62.0	10 - 20 (Poises)	4 max.	1 max.	Low free formaldehyde
n-Butylated benzoguanamine	AMIDIR TD-126	Xylene, n-Butanol	58.0 - 62.0	A1 - C	2 max.*	1 max.	Flexibility, high gloss

* Calculated from solution value

Product tree for protective coatings (solventborne)



Product tree for protective coatings (waterborne)



Product characteristics for protective coatings

Heavy duty & Construction materials

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Color, Gardner	Features
1K Epoxy	EPICLON H-305-45T	Toluene, Xylene, n-Butanol, Methoxy propyl acetate	44.0 - 46.0	Z1 - Z4	—	—	—	3 max.	Adhesion, pigment dispersibility, anti-corrosion
2K Epoxy	Idepoxy-7954	Xylene	73.0 - 77.0	W - Y	620 - 680 (EEW on solids, g/eq)	—	—	18 max.	High-solids, low viscosity, hardness, chemical resistance
Polyester	Idester-2749	—	96.0 - 100.0	20 - 40 (Poises)	155 - 165	4.7 - 5.0*	3 max.	6 - 8	Fast drying, high gloss
2K Acrylic	ACRYDIC AU-7526	n-Butyl acetate	79.0 - 81.0	Z5 - Z7	130 - 140	3.9 - 4.2	15 max.*	1 max.	Super high solids, adhesion to metal, anti-corrosion
	Idecryl-2616	Xylene, n-Butyl acetate	72.5 - 75.5	Z3 - Z4	150	4.5*	5 - 8	1 max.	High gloss (DOI), gasoline resistance
	Idecryl-1063	Xylene	68.0 - 72.0	80 - 100 (Seconds, Ford cup #4, 50% solution in xylene, 30°C)	70 - 73	2.1 - 2.2*	8 max.	1 max.	Intercoat adhesion
	Idecryl-8067	Xylene, Methoxy propyl acetate	58.0 - 62.0	Z1 - Z3	90 - 100	2.7 - 3.0*	5 max.	1 max.	Anti-corrosion
	Idecryl-6988	Cellosolve acetate, Xylene	58.0 - 62.0	Z1 - Z3	75 - 85	2.3 - 2.8*	5 max.	1 max.	Fast drying
	Idecryl-5924	Xylene	58.0 - 62.0	Z - Z1	75 - 95	2.3 - 2.9	8 max.*	1 max.	Fast drying
Airdry Alkyd	Idekyd-1030	Xylene	53.0 - 57.0	40 - 60 (Poises)	90 - 110	2.7 - 3.3*	20 max.	6 max.	Oil length=28, type of oil=Soybean, fast drying, high gloss
Airdry/2K Epoxy ether	Idepoxyether-7697	Xylene	63.0 - 67.0	40 - 60 (Seconds, Ford cup #4, 40% solution in xylene, 30°C)	73 - 78	2.2 - 2.4*	—	18 max.	Anti-corrosion
	Idepoxyether-8432	Xylene	68.0 - 72.0	25 - 35 (Seconds, Ford cup B-4, 40% solution in xylene, 30°C)	45 - 50	1.4 - 1.5	—	12 max.	Fast drying, aerosol, zinc coating
2K Epoxy ester	Idepoxyester-75	Xylene	73.0 - 77.0	46 - 148 (Poises)	625 - 775 (EEW on solids, g/eq)	2.4 - 2.7*	5 max.	10 max.	Adhesion on untreated metal surfaces
	Idemide-200	Xylene, n-Butanol	50.0 - 54.0	6 - 12 (Poises, 30°C)	180 - 220 (Amine value on solids, mgKOH/g)	—	—	10 max.	Polyamide hardener, no blushing in humid climate

* Calculated from solution value

DTM

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Color, Gardner	Features
Airdry Epoxy ester	Idepoxyester-60	Xylene	58.0 - 62.0	15 - 35 (Poises(30°C))	120 - 130	3.6 - 3.9	5 max.	8 max.	Anti-corrosion
Airdry Acrylated alkyd	ALUKIDIR AL-3330	Xylene	49.0 - 51.0	R - V	—	—	14 max.	5 max.	Adhesion to galvanized steel, high-gloss, chemical resistance
1K Acrylic	ACRYDIC LA-9501	Xylene, n-Butanol	59.0 - 61.0	Z3 - Z5	91	2.7*	5 - 10*	1 max.	Adhesion, flexibility, high gloss, chemical resistance
2K Acrylic	ACRYDIC AU-7500-IM	Xylene	69.0 - 71.0	Z4 - Z6	55 - 65	1.7 - 2.0	1.4 - 5.7	1 max.	High gloss, adhesion to metal, physical properties, chemical resistance, sandability
	ACRYDIC AU-7526	n-Butyl acetate	79.0 - 81.0	Z5 - Z7	130 - 140	3.9 - 4.2	15 max.*	1 max.	Super high solids, adhesion to metal, anti-corrosion
	Idecryl-1063D	Xylene	63.0 - 67.0	150 - 200 (Poises)	75 - 85	2.3 - 2.6*	12 max.	1 max.	Adhesion on aluminium and galvanized steel (GI)
	Idecryl-8062	Xylene	53.0 - 57.0	20 - 30 (Poises)	48 - 50	1.4 - 1.5*	5 max.	1 max.	Fast drying, weather resistance

* Calculated from solution value

Aerosol

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	Acid value on solids, mgKOH/g	Oil length	Type of oil	Color, Gardner	Features
Airdry Alkyd	Idekyd-1325	Xylene	58.0 - 62.0	12 - 18 (Poises)	15 max.	18	Soybean/DCO	6 max.	Fast drying, high gloss
Airdry Epoxy ester	Idepoxyester-7475	Xylene	58.0 - 62.0	Z - Z1	18 max.	—	—	6 max.	Fast drying, anti-corrosion coatings

Product characteristics for protective coatings

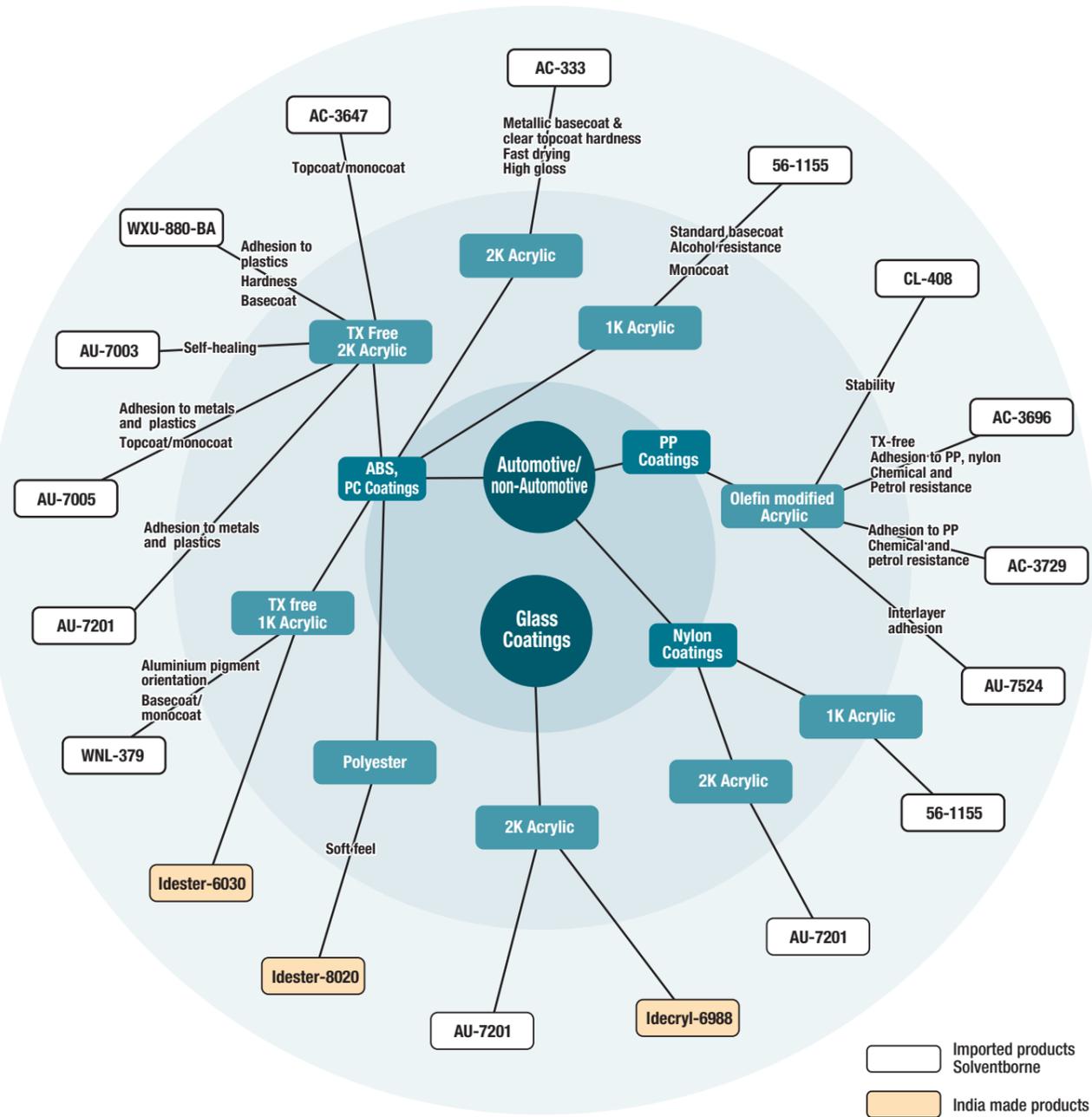
Heat resistance

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	Acid value on solids, mgKOH/g	Color, Gardner	Features
Silicone modified Polyester	Idestersilicon-2849	Methoxy propyl acetate	58.0 - 62.0	17 - 22 (Poises)	8 max.	1 max.	Heat resistance (up to 300°C with properly formulated coating), non-yellowing
Silicone modified Epoxy	Idepoxysilicon-3050	Methoxy propyl acetate, Xylene	50.0 - 54.0	X - Z	8 max.	2 max.	Heat resistance (up to 600°C with properly formulated coating)
	Idepoxysilicon-8055	Xylene	50.0 - 54.0	Q - V	8000 - 10000 (EEW on solids, g/eq)	12 max.	Air-drying, anti-corrosion, heat resistance (up to 600°C with properly formulated coating)

Heavy duty & Construction materials (Waterborne)

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	pH	Features
2K Epoxy	EPICLON EM-102-60M	Water	59.0 - 61.0	50 - 2000 (mPa.s)	480 - 530 (EEW on solids, g/eq)	—	Corrosion resistance, pigment dispersibility, VOC free
	LUCKAMIDE WN-720	Water, Propylene glycol monomethyl ether	48.0 - 52.0	Z - Z4	177 (AHEW on solids, g/eq)	—	Polyamide hardener, anti-corrosion
Organic-Inorganic hybrid	CERANATE WHW-822	Diethylene glycol butyl ether, Water, Isopropyl alcohol	34.0 - 36.0	10 - 1000 (mPa.s)	—	7.5 - 8.5	Weather resistance, stain resistance, adhesion to glass, metals and plastics
	CERANATE WSA-1070	Diethylene glycol butyl ether, Water, Isopropyl alcohol	39.0 - 41.0	20 - 500 (mPa.s)	—	7.5 - 8.5	Weather resistance, stain resistance, adhesion to glass, untreated aluminium and untreated PET
1K Epoxy	EPICLON H-502-42W	Water, Butyl cellosolve, Isopropyl alcohol	37.0 - 41.0	500 - 10000 (mPa.s)	—	8.0 - 11.0	Anti-corrosion, pigment dispersibility, storage stability
	EPICLON H-506-42W(T)	Water, Butyl cellosolve	37.0 - 41.0	500 - 10000 (mPa.s)	—	9.0 - 11.0	Adhesion to metal, anti-corrosion
Airdry Epoxy ester	WATERSOL EFD-5580	Water, Propylene glycol butyl ether, Propylene glycol monopropyl ether, Dimethylethanolamine	39.0 - 41.0	50 - 3000 (mPa.s)	—	8.0 - 9.0	Anti-corrosion, weather resistance, compatibility and dispersibility with anti-corrosion pigment
Airdry Alkyd	Idekyd-7587	Ethyl cellosolve, sec-Butanol	68.0 - 72.0	12 - 17 (Poises)	—	—	High gloss

Product tree for plastic & glass coatings



Product characteristics for plastic & glass coatings

Automotive / Non-automotive - ABS, PC coatings

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Color, Gardner	Features
1K Acrylic TX free	ACRYDIC WNL-379	MIBK, Isobutanol, Ethyl acetate	39.0 - 41.0	P - W	—	—	1 - 5*	1 max.	Chemical resistance, appearance on metallic coatings, adhesion to plastics such as ABS, PC and PC/ABS, aromatic solvent free
	Idecryl-6030	Ethyl cellosolve	48.0 - 52.0	8 - 10 (Poises)	—	—	5 max.	1 max.	Adhesion to plastic, decorative
1K Acrylic	ACRYDIC 56-1155	Toluene, iso-Butanol, n-Butyl acetate	44.0 - 46.0	Y - Z2	—	—	2 max.	1 max.	Fast drying, gasoline and alcohol resistance, hardness, adhesion on plastics, compatibility with nitrocellulose (NC), vinyl (especially VAGH) and various plasticizers
2K Acrylic TX free	ACRYDIC AU-7201	n-Butyl acetate, methyl isobutyl ketone, propylene glycol methyl ether acetate	49.0 - 51.0	S - W	22 - 42	0.7 - 1.3	8 max.	1 max.	Adhesion to metal, glass and plastics
	ACRYDIC AU-7005	n-Butyl acetate, Propylene glycol methyl ether acetate, MEK	54.0 - 56.0	V - Z1	59 - 70*	1.8 - 2.1*	7 - 13*	1 max.	Chemical resistance, excellent adhesion to plastics and metal plating, aromatic solvent free
	ACRYDIC AU-7003	Propylene glycol methyl ether acetate	59.0 - 61.0	G - L	138 - 148*	4.2 - 4.5*	5 - 10*	1 max.	Self-healing, adhesion to plastics
	ACRYDIC WXU-880-BA	iso-Butyl acetate, MIBK	49.0 - 51.0	Z1 - Z5	14 - 26*	0.4 - 0.8*	2 - 6*	1 max.	Adhesion to plastics, aluminium pigment orientation, hardness
2K Acrylic	ACRYDIC AC-3647	n-Butyl acetate	69.0 - 71.0	Z5 - Z7	90 - 100	2.7 - 3.0	5 max.*	1 max.	Fast drying, high gloss, adhesion, weather resistance
2K Acrylic	ACRYDIC AC-333	Toluene, n-Butyl acetate	49.0 - 51.0	W - Y	66 - 78	2.0 - 2.4	4 - 8*	1 max.	Leveling, high gloss, adhesion, flexibility, hardness, mar resistance, recoatability, chemical resistance
Polyester	Idester-8020	—	96.0 - 100.0	27 - 36 (Poises)	119.5 - 122.5	3.6 - 3.7	3 max.	1 max.	Low viscosity, solvent-free, plasticizer

*Calculated from solution value

Automotive / Non-automotive - PP coatings

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Color, Gardner	Features
Olefin modified Acrylic	ACRYDIC CL-408	Toluene, Solvesso-100, n-Butyl acetate	44.0 - 46.0	Z2 - Z4	29 - 38	0.9 - 1.1	5 max.*	2 max.	Adhesion to plastics especially PP
	ACRYDIC AC-3696	n-Butyl acetate	57.0 - 59.0	Z3 - Z6	15 - 25	0.4 - 0.8	6 max.*	—	Adhesion to plastics especially PP as 1K or 2K systems, TX free
	ACRYDIC AC-3729	Xylene, n-Butyl acetate	51.0 - 53.0	Z3 - Z6	15 - 25	0.4 - 0.8	0 - 6	—	Adhesion to PP, chemical and petrol resistance
	ACRYDIC AU-7524	Xylene, n-Butyl acetate	51.0 - 53.0	Z3 - Z6	35 - 45	1.0 - 1.4	2 max*	—	Adhesion to plastics especially PP as 1K or 2K systems

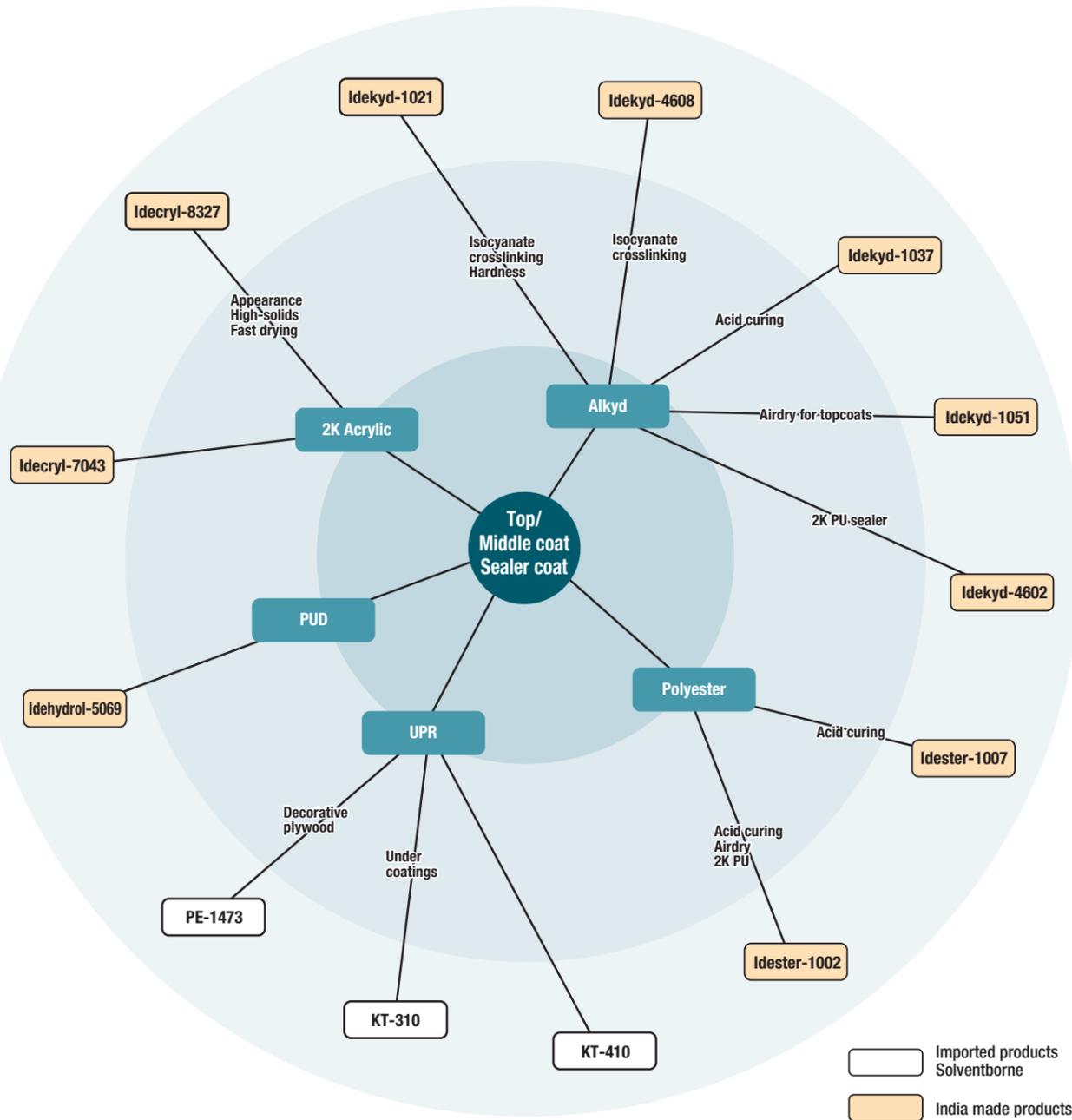
*Calculated from solution value

Glass coatings

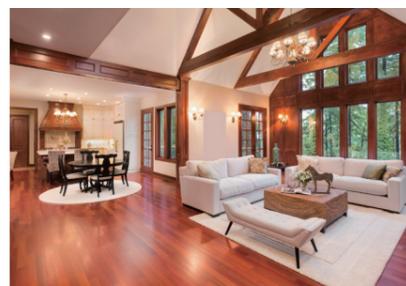
Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Color, Gardner	Features
2K Acrylic	Idecryl-6988	Cellosolve acetate, Xylene	58.0 - 62.0	Z1 - Z3	75 - 85	2.3 - 2.8*	5 max.	1 max.	Fast drying, adhesion to metals and plastics
	ACRYDIC AU-7201	n-Butyl acetate, methyl isobutyl ketone, propylene glycol methyl ether acetate	49.0 - 51.0	S - W	22 - 42	0.7 - 1.3	8 max.	1 max.	Adhesion to metal, glass and plastics

*Calculated from solution value

Product tree for wood coatings



 Imported products
 Solventborne
 India made products



Product characteristics for wood coatings

Top /Middle coat, Sealer coat

Type	Product name	Solvent	Solids content, %	Viscosity, Gardner	OH value on solids, mgKOH/g	OH content on solids, %	Acid value on solids, mgKOH/g	Color, Gardner	pH	Features
PUD	Idehydrol-5069	Water, NMP	35.0 - 37.0	20 - 40 (Seconds, 30°C, Ford cup #4)	35 - 45	1.1 - 1.4*	—	—	7.0 - 8.0	Hardness, high gloss, anti-corrosion
2K Solventborne Acrylic	Idecryl-7043	n-Butyl acetate	48.0 - 52.0	27 - 46 (Poises)	63 - 69	1.9 - 2.1	6 max.	1 max.	—	Fast drying
	ACRYDIC AC-3646	n-Butyl acetate	69.0 - 71.0	Z3 - Z6	90 - 100	2.7 - 3.0	5 max.*	1 max.	—	Fast drying, high gloss, adhesion
	Idecryl-8327	Xylene, n-Butyl acetate	68.0 - 72.0	98 - 148 (Poises)	95 - 105	2.9 - 3.2	8 max.	1 max.	—	Fast drying
Alkyd	Idekyd-1021	Xylene	59.0 - 61.0	Z1 - Z2	119 - 129	3.6 - 3.9*	12 - 16	4 max.	—	Oil length=40, type of oil=Castor/Olive, non-yellowing, high gloss
	Idekyd-4608	Xylene	58.0 - 62.0	1500 - 3000 (mPa.s)	160 - 170	4.8 - 5.2*	9 max.	5 max.	—	Oil length=48, type of oil=Castor, non-yellowing, high gloss, hardness
	Idekyd-1037	Xylene	68.0 - 72.0	80 - 100 (Seconds, 30°C, Ford cup #4, 50% resin solution in Xylene)	120 - 140	3.6 - 4.2*	10 max.	6 max.	—	Oil length=39, type of oil=Soybean, high gloss
	Idekyd-1051	Mineral turpentine	58.0 - 62.0	50 - 60 (Seconds, 30°C, Ford cup #4, 50% resin solution in Mineral turpentine)	25 - 35	0.8 - 1.1	10 max.	6 max.	—	Oil length=58, type of oil=Soybean, fast drying, high gloss
	Idekyd-4602	Xylene	48.0 - 52.0	V - W	150 - 170	4.5 - 5.2*	25 max.	2 max.	—	2K PU sealer
Polyester	Idestester-1007	Xylene	68.0 - 72.0	50 - 70 (Seconds, 30°C, Ford cup #4, 50% resin solution in Xylene)	120 - 140	3.6 - 4.2*	10 max.	1 max.	—	Non-yellowing, high gloss
	Idestester-1002	Xylene	73.0 - 77.0	60 - 90 (Poises)	150 - 170	4.5 - 5.2*	10 max.	1 max.	—	Hardness

* Calculated from solution value

Product Characteristics for Wood Coatings

Type	Product name	Viscosity, Gardner	Gel time, minutes, at 25°C	Gel time methods at 25°C*	Features
UPR	SUNDHOMA KT-410	N - Q	20.00 - 30.00	PGT	Wax type, sandability, fast drying, hardness, for topcoats
	SUNDHOMA KT-310	T - V	17.00 - 23.00	PGT	Non-wax type, sandability, fast drying, hardness, for under coating
	SUNDHOMA PE-1473	360 - 460 (cPs)	5 - 8	**	Fast curing, high gloss, pigment dispersion, chemical resistance

* Gel time method PGT : Resin / 6%Co-Oct / 55%MEKPO = 50gr / 1.0gr / 1.0gr
 NPGT : Resin / 6%Co-Oct / 55%MEKPO = 50gr / 0.25gr / 0.5gr
 ** Gel time method: Resin/50% MEKPO = 50 gr/0.5gr

Characteristics of solvents

Classification	Name	Molecular formula	Molecular weight	Boiling point(°C)	S.P	Specific gravity	Flash point (TCC · °C)	Ignition point (°C)	Explosion limit (VOL %)
Hydrocarbons	Benzene	C ₆ H ₆	78	80.1	9.2	0.874/25°C	-11.1	562.2	1.4 ~ 7.1
	Toluene	C ₆ H ₅ CH ₃	92	110.6	8.9	0.867/25°C	4.4	552	1.27 ~ 7.0
	Xylene	C ₆ H ₄ (CH ₃) ₂	106	136 ~ 141	8.8	Approx. 0.87/25°C	23 ~ 27	463 ~ 528	1.0 ~ 7.0
	Solvesso-100	—	—	155 ~ 181		0.88/15°C	Over 41	Over 450	0.8 ~ 7.0
	Solvesso-150	—	—	178 ~ 209		0.900/15°C	Over 62	Over 450	0.6 ~ 7.0
	SWASOL 1800	—	—	206		0.93/(15/4°C)	79	465	
	ISOPA-E	—	—	113 ~ 143		0.72/15°C	7	395	0.9 ~ 6.2
	ISOPA-G	—	—	153 ~ 178		0.75/15°C	Over 40	365	0.7 ~ 5.6
	LAWS (45°C terpene)	—	—	160 ~ 200		0.798/15°C	46		1.4 ~ 7.6
	PEGASOL 3040 (55°C terpene)	—	—	150 ~ 200		0.78/15°C	40~45	230	0.6 ~ 6.5
Alcohols	Methanol	CH ₃ OH	32	64.5	14.7	0.791/20°C	12	470	6.0 ~ 36.5
	Ethanol	C ₂ H ₅ OH	46	78.3	12.7	0.789/20°C	14	390	4.3 ~ 19.0
	Isopropyl alcohol	(CH ₃) ₂ CHOH	60	82.4	11.5	0.786/20°C	11.7	460	2.02 ~ 7.99
	n-Butanol	C ₄ H ₉ OH	74	117.7	11.4	0.810/20°C	35	340	1.45 ~ 11.25
	iso-Butanol	(CH ₃) ₂ CHCH ₂ OH	74	107.9	11.1	0.802/20°C	27.5	434	1.68 ~ 10.5
	Diacetone alcohol	(CH ₃) ₂ C(OH)CH ₂ COCH ₃	116	169.2		0.938/20°C	60	603	1.8 ~ 6.9
	3-Methoxy-1-butanol	CH ₃ CH(OCH ₃)CH ₂ CH ₂ OH	104	161		0.921/20°C	64.5	239	3.6 ~ 11.0
	3-Methyl-3-methoxy butanol	(CH ₃) ₂ C(OCH ₃)CH ₂ CH ₂ OH	118	174	9.3	0.927/20°C	68	395	
Ketones	Acetone	CH ₃ COCH ₃	58	56.1	10.0	0.785/25°C	17.8	561	2.55 ~ 7.80
	Methyl ethyl ketone	CH ₃ COC ₂ H ₅	72	79.6	9.3	0.800/25°C	7.2	516	1.81 ~ 8.5
	Methyl isobutyl ketone	(CH ₃) ₂ CHCH ₂ COCH ₃	100	115.9	8.4	0.796/25°C	15.6	465.5	1.35 ~ 11.60
	Isophorone	C ₈ H ₁₄ O	138	213		0.92/20°C		462	0.8 ~ 3.8
	Cyclohexanone (anone)	(CH ₂) ₅ CO	98	155.7	9.9	0.948/20°C	44	420	1.1 ~ 8.1
Esters	Ethyl acetate	CH ₃ COOC ₂ H ₅	88	77.1	9.1	0.901/20°C	4	425	2.18 ~ 11.4
	n-Butyl Acetate	CH ₃ COOC ₄ H ₉	116	126.1	8.5	0.881/20°C	27	421	1.4 ~ 8.0
	Isobutyl acetate	CH ₃ COOCH ₂ CH(CH ₃) ₂	116	117.3	8.4	0.871/20°C	21	463	1.85 ~ 11.0
	Ethoxyethyl propionate	CH ₃ CH ₂ OCH ₂ CH ₂ COOC ₂ H ₅	146	169.7		0.950/20°C	59		~ 1.05
	3-Methoxy butyl acetate	CH ₃ COOCH ₂ CH ₂ CH(OCH ₃)CH ₃	146	171		0.950/20°C	62.5	408	2.3 ~ 15
	Propylene glycol monomethyl ether acetate	CH ₃ COOC(CH ₂) ₂ OCH ₃	131	146		0.960/20°C		272	1.5 ~ 10
	Cellosolve acetate	C ₂ H ₅ OCH ₂ CH ₂ OCOCH ₃	132	156.3	8.7	0.973/20°C	51	379	1.7 ~ 8.2
Ethers	Cellosolve (ethyl cellosolve)	C ₂ H ₅ OCH ₂ CH ₂ OH	90	135.6	9.9	0.930/20°C	45	238	1.8 ~ 14.0
	Butyl cellosolve	C ₄ H ₉ OCH ₂ CH ₂ OH	118	170.2		0.90/20°C	61	244	1.1 ~ 10.6
	Isobutyl cellosolve	CH ₃ C(CH ₃) ₂ OCH ₂ CH ₂ OH	118	160.5	9.3	0.903/20°C	50	417	
	Propyl cellosolve	C ₃ H ₇ OCH ₂ CH ₂ OH	104	149.5		0.908/20°C	49(*1)	235	1.26 ~ 15.8
	Isopropyl cellosolve	(CH ₃) ₂ CHOCH ₂ CH ₂ OH	104	142.8		0.908/20°C	54	320	1.7 ~ 20
	Propylene glycol monomethyl ether	CH ₃ OCH ₂ CH(OH)CH ₃	90	120	10.4	0.920/20°C	34.5	278	3 ~ 12
	Propylene glycol monoethyl ether	C ₂ H ₅ CH ₂ CH(OH)CH ₃	104	132	7.5	0.898/20°C	39.5	272	1.3 ~ 12
	Butyl carbitol	C ₄ H ₉ OCH ₂ CH ₂ OCH ₂ CH ₂ OH	162	230.4	8.9	0.954/20°C	78	227	1.1 ~ 10.6

(Note) Written data are quoted from manufacturer's catalog, MSDS, etc.

(*1) Seta sealing

Gardner bubble viscosity conversion table

(25°C)

Gardner viscosity	Poises *	Stokes	Gardner inversion seconds	Iwata cup I.H.S.(Seconds)	Ford cup #4(Seconds)	Zahn cup #2(Seconds)	Zahn cup #4(Seconds)
A5	0.00505 × Specific gravity	0.00505					
A4	0.0624	0.0624			5.0	16	
A3	0.144	0.144		2.5	8.0	17	
A2	0.220	0.220		9.0	13.6	19	
A1	0.321	0.321		12.0	15.3	20	
A	0.50	0.50		16.0	19.0	22	
B	0.65	0.65		19.5	22.0	27	
C	0.85	0.85		26.0	27.0	34	
D	1.00	1.00	1.46	29.5	30.0	41	
E	1.25	1.25	1.83	37.0	36.0	49	11
F	1.40	1.40	2.05	42.0	40.0	58	13
G	1.65	1.65	2.42	49.0	46.0	66	14
H	2.00	2.00	2.93	54.0	50.0	82	17
I	2.25	2.25	3.30	60.0	55.0		18
J	2.50	2.50	3.67	76.0	68.0		20
K	2.75	2.75	4.03	86.0	74.0		22
L	3.00	3.00	4.40		81.0		24
M	3.20	3.20	4.70		86.0		25
N	3.40	3.40	5.00		91.0		26
O	3.70	3.70	5.40		99.0		28
P	4.00	4.00	5.80		107.0		30
Q	4.35	4.35	6.40		116.0		33
R	4.70	4.70	6.90		125.0		34
S	5.00	5.00	7.30		133.0		37
T	5.50	5.50	8.10		146.0		40
U	6.27	6.27	9.20		167.0		44
V	8.84	8.84	13.00		199.0		64
W	10.70	10.70	15.70		270.0		
X	12.90	12.90	18.90				
Y	17.60	17.60	26.10				
Z	22.70	22.70	33.30				
Z1	27.00	27.00	39.60				
Z2	36.20	36.20	52.85				
Z3	46.30	46.30	67.9				
Z4	63.40	63.40	92.6				
Z5	98.50	98.50	143.8				
Z6	148.00	148.00	217.1				
Z7	388.00	388.00	566.5				
Z8	590.00	590.00	865.5				
Z9	855.00	855.00	1254.0				
Z10	1066.00	1066.00	1563.7				

● Viscosity

Pa·s	cP	P
1	1x10 ³	1x10
1x10 ⁻³	1	1x10 ⁻²
1x10 ⁻¹	1x10 ²	1

(Note: 1P=1dyn·s/cm²=1g/cm·s, 1Pa·s=1N·s/m², 1cP=1mPa·s)

* Poises=Stokes x Specific gravity



The product data provided in this document are typical values, intended only as a guide, and should not be interpreted as sales specifications. For more detailed values, check each product TDS.



DIC SOUTH ASIA PRIVATE LIMITED

Color & Comfort

Head Office :

903, B Wing, KANAKIA WALLSTREET, Chakala, Andheri Kurla Road, Andheri East, Mumbai 400093, India
Tel : +91-22-4938 8015



IDEAL CHEMI PLAST

a member of the DIC group



Color & Comfort

Office & Factory :

Plot no. A-2, MIDC, Badlapur, Kulgao Thane,
Maharashtra 421503, India

Tel : +91-251-2690469

Factory :

Plot E2, SUPA industrial park, Ahmednagar District,
Maharashtra, India



Siam Chemical Industry

a member of the DIC group



Color & Comfort

Head Office :

159/34 SERM-MIT TOWER 20th Floor., Soi Asoke, Sukhumvit 21 Road, Kwang North Klongtoey, Khet Wattana, Bangkok 10110, Thailand
TEL : +66-2-260-7400 FAX : +66-2-260-7408-9

Factory :

549 Moo 7 Sukhumvit Road KM. 36 T.Bangpoomai, A.Muang, Samutprakarn 10280, Thailand

TEL : +66-2-323-9215 FAX : +66-2-323-9616

<http://www.siamchem.com>



PT.PARDIC JAYA CHEMICALS

a member of the DIC group



Color & Comfort

Head Office & Factory :

Jl. Gatot Subroto Km. 1, Kel. Cibodas - Kota Tangerang, 15138, Banten, Indonesia

TEL : +62-21-570-7330 FAX : +62-21-552-3753

<http://www.pardic.co.id>



DIC Asia Pacific Pte Ltd.

Color & Comfort

Regional Head Office :

78 Shenton Way, No.19-01, Singapore 079120

TEL : +65-6224-0600 FAX : +65-6224-3313

<http://www.dic-global.com/ap/en>

DIC Corporation

DIC Building, 7-20, Nihonbashi 3-chome, Chuo-ku, Tokyo 103-8233, Japan



Visit our coating resins webpage