



SOLTECH LTD.

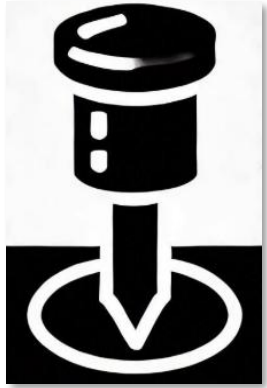
UV coating solution

**UV Curable Oligomers
Manufacturer in South Korea**



Company name	Soltech Ltd
Representative	Minkyu Park(President)
Headquarter/office/plant	#75, Sanmakgongdan Buk 1-gil, Yangsan city, S.Korea
China branch	Office/Warehouse/Factory in Shanghi China
Found	1999
Business content	UV curable urethane acrylate, epoxy acrylate, polyester acrylate, additives
Contact person	gilbert.kim@uvpia.com, gsjeon1@uvpia.com

Business fields



Hard coating



Adhesive



Inks



Paint



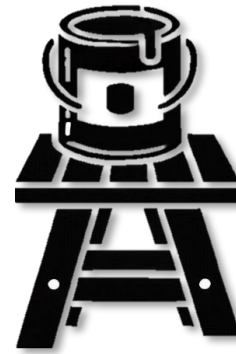
Water based



3D resins



Plastic coatings



Wood coatings



Industrial coatings

Product lines and Sales volume



Urethane A	Epoxy A	Polyester A	Acrylic A	Additives	ETC
50%	18%	12%	10%	5%	5%

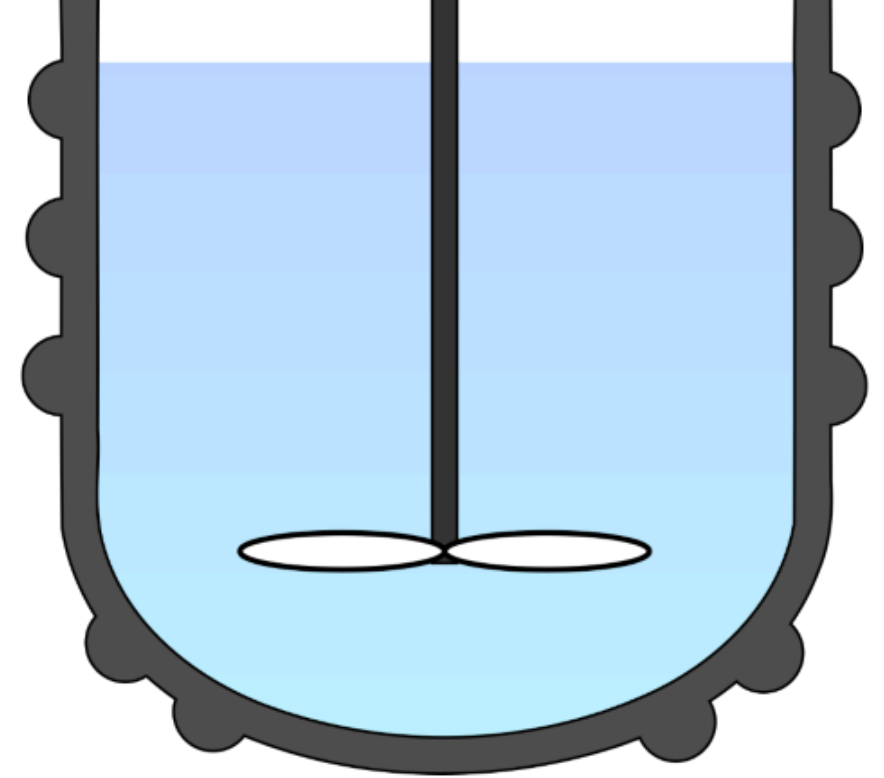
Capacity – Korea Factory



Pilot Reactors	• 50 Kg	X 2 EA
	• 300 Kg	X 1 EA
	• 500 Kg	X 1 EA
	• 1,000 Kg	X 1 EA
Main Reactors	• 2,000 Kg	X 1 EA
	• 2,000 Kg	X 1 EA
	• 3,000 Kg	X 1 EA
	• 3,000 Kg	X 1 EA
	• 5,000 Kg	X 1 EA
Low Viscosity Reactors	• 15,000 Kg	X 2 EA

Production Capacity
(Except Low vis. Reactor)

16,000 ~ 31,000kg / day
5,000 ton / year
3,000 ton / year : Minimum



Warehouse



Regarding MOQ, standard packaging is 200kgs in a steel drum and 20kg in a plastic pain for trial.

In case of Drum, 1 drum without pallet and more than 3 drums with pallet by sea and trial order, 20kgs in a pail by air(courier service by DHL, FEDEX, UPS etc.)

China Sales office and Factory

- **5tons**
 - **3tons x 2ea**
 - **2tons x 2ea**
 - **300kg x 1**
- **Max 15.3ton/day**
 - **Approximately 300tons / month**
 - **Approximately 3000tons / year**



Soltech China

Certificates

International Certification Registrar



Certificate of Registration

This is to certify that:

SOLTECH LTD.
#75, Sanmaggongdanbuklgil, Yangsan-si, Gyeongsangnam-do, Korea

Has been assessed by International Certification Registrar Ltd., in respect of their Quality Management Systems and found to comply with

ISO 9001:2015
Approval is hereby granted for registration providing the rules and conditions relating to certification are observed at all times.

Certification Scope
Design/Development and Production of Urethane Acrylate, Epoxy Acrylate, Polyester Acrylate, Additives, Acrylic Monomer

Certification Date : 20 th June 2024	Initial Issued Date : 23 rd July 2010
Certificate Issue Date : 20 th June 2024	Expiration Date : 02 nd July 2027
Certificate No. : Q1263723	IAF CODE : 12, 14

✘ This certificate is valid by completion of surveillance audit which is conducted within 12 months from the certification date.
✘ Refer to appendix for detailed activities and location of each sites.

The Seal of ICR Limited was here to affixed in the presence of:



President






- This certificate is the intellectual property of ICR.
- This certificate is only valid by completion of surveillance audit which is conducted at least once a year.
- You can verify the authenticity of this certificate on "Certification Center" at www.icr.org.
- You can not transfer the certificate. This certificate shall be renewed to ICR.

ICR Co., Ltd. 190, Daejeong-Poong Tower 6th, 336, Seodang-ro, Seomun-gu, Seou, Korea <http://www.icr.org>

International Certification Registrar



Certificate of Registration

This is to certify that:

SOLTECH LTD.
#75, Sanmaggongdanbuklgil, Yangsan-si, Gyeongsangnam-do, Korea

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ISO 14001:2015
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Certificate No. : E1145723	IAF CODE : 12, 14



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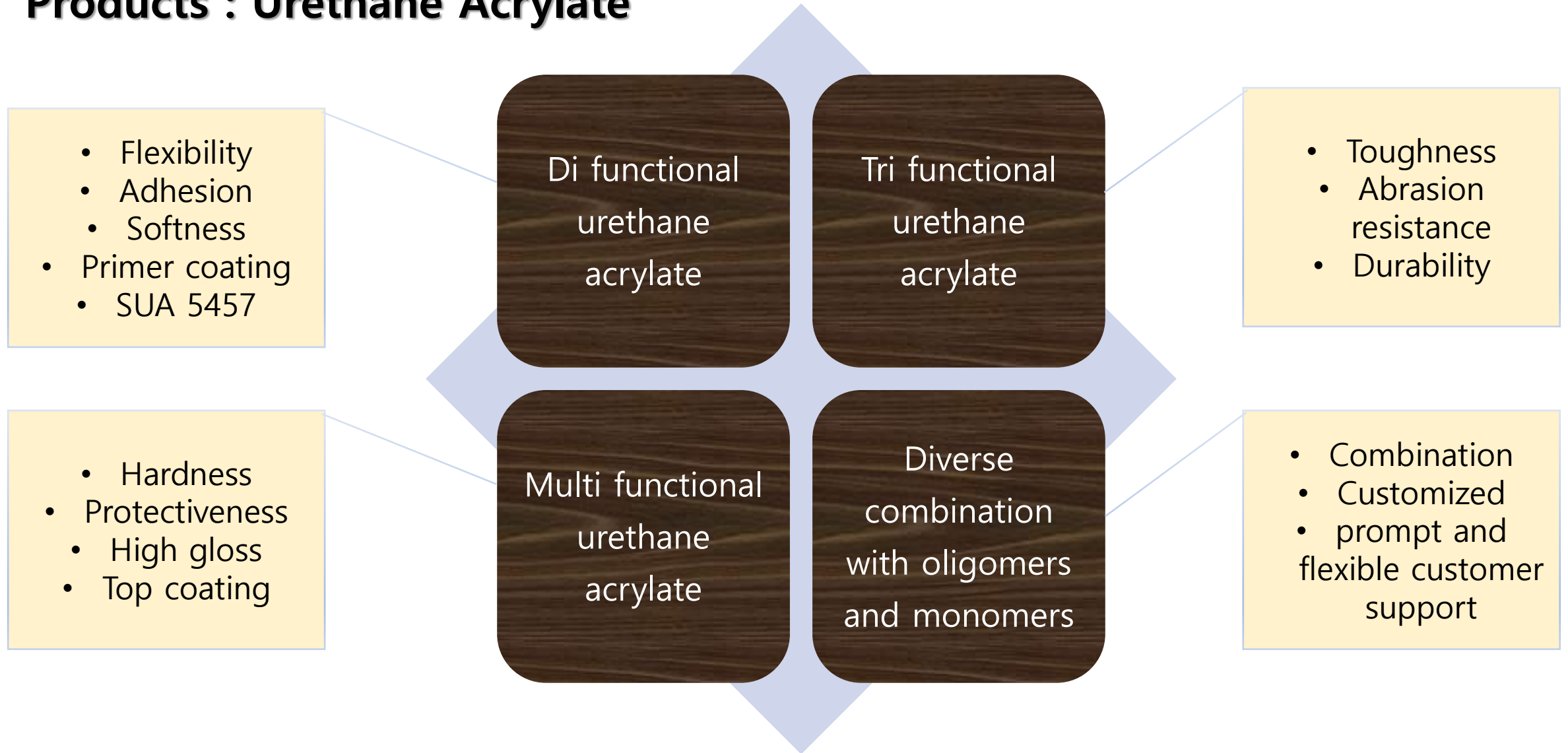
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Soltech Strengths

- Prompt reaction
- Small volume(20kg)
- Flexibility(for distributing, time, method, communication)
- Customized products / co-development

Products : Urethane Acrylate



Di-functional Urethane acrylate

Grade	Functionality	Viscosity(60C) cPs	Density g/cm ³	Elongation %	Toughness psi	Properties
SUA 5457	2	85,000	1.08	200	1400	High elongation, durability, toughness, adhesion
SU 5656	2	60,000	1.07	150	600	High elongation, durability, elasticity, adhesion
SU 584	2	2,000	1.13	30	4400	Excellent durability, toughness, adhesion

* SU 5225, SUA 5448, SUA 5457(Monomer 24% cut version)

Grade	Functionality	Viscosity(60C) cPs	Density g/cm ³	Elongation %	Toughness psi	Properties
SUA 5605	2	2,000	1.07	270	600	High elongation, durability, toughness, adhesion

What's new of SUA 5605?

- Easy to control, freezing protection improved.
- Excellent transparency, compatibility, stability, durability(QUV 1000hours, ASTM G154)
- Low odor version is available

Tri-functional Urethane acrylate

Grade	Functionality	Viscosity(60C) cPs	Density g/cm ³	Elongation %	Toughness psi	Properties
SU 5260	3	2500	1.16	10	4500	Fast curing, good flexibility, good abrasion resistance
SU 594	3	7500	1.12	5	10000	Excellent toughness
SU 574	3	2000	1.10	20	3500	Excellent flexibility and toughness

What's new

- Good abrasion resistance, Excellent toughness, fast curing.
- SU 594 toughness by 10,000 psi by UTM (10cm x 2cm x 120um)
- Good durability : Generally had good result in QUV 1000hours,
less denaturation of the coating film
- Softness : SU 5260 < SU 574 < SU 594

Multi-functional Urethane acrylate

Grade	Functionality	Viscosity(60C) cPs	Density g/cm3	Hardness(750)	Properties
SU 571	6	1000	1.2	5H↑	Standard hexa functional urethane acrylate

Grade	Functionality	Viscosity(60C) cPs	Density g/cm3	Hardness(750)	Properties
SUA 5389	6	1400	1.2	8H↑	Good hardness and steel wool resistance
SUA 5187	6	2000	1.05	3H↑	Tacky-free after solvent drying, good hardness

Nona-, Deca functional urethane acrylate are available

What's new

- SUA 5389 : RCA/Steel wool resistance improved, high hardness
- SUA 5187 : Solvent type, tack free after drying, no scratch/good hardness after UV curing.
Good QUV result compared with standard hard coating products (700hours ASTM G154)

	100hrs	200hrs	300hrs	400hrs	500hrs	600hrs	700hrs
SUA 5187	-8.5	-5.5	-5	0	-2	-1.4	3.6
6f urethane acrylate	-8.3	2	4.2	6.8	8.4	10	10.5

The higher the number is, the more yellow its coating film is

Products : Epoxy Acrylate

- Good hardness and Toughness balanced.
- Good chemical, physical durability and resistance.
- Good toughness and flexibility in Epoxy acrylate



Grade	Viscosity (60C) cPs	Density g/cm3	Elongation %	Toughness psi	Properties
SE 1701	7,500	1.20	7	6600	Excellent flexibility and good adhesion
SEA 1102	1,200	1.13	-	-	Both Acrylate with Epoxy func, good hardness with toughness
SE 1701X18	1,100	1.16	-	-	Good flexibility, Excellent solvent resistance and abrasion resistance

Products : Polyester & Full Acrylate

What's new

- SP 277 : Excellent adhesion on metal, alkali-strippable
- SP 280, SP 281N, SP 283 : Low viscosity, Fast reaction
- SP 287 : Good for Pigment wetting, paste grinding
- REACH not available

Grade	Viscosity (25C) mPas	Density g/cm3	Acid value	Properties
SP 277	6500	1.19	AV=200	Excellent adhesion on metal, alkali-strippable polyester acrylate
SP 280	3000	1.11		Low viscosity, high reactivity. Flexo ink
SP 281N	100	1.07		Good reactivity, Ink jet ink
SP 283N	1500	1.14		Very good reactivity, flexo ink , let down
SP 287	35,000	1.14	5 Max	Hexa functional polyester acrylate for pigment wetting , hardness and fast curing
PSP 1723	8,000(60C)	1.20	5 Max	Good adhesion, excellent wet lithographic behavior
SPA 2027	5,500(60C)	1.07	5 Max	Good adhesion, excellent wet lithographic behavior
SP 236	2,600(60C)	1.20	5 Max	Chlorinated polyester acrylate, good adhesion on metal/paper, excellent wet lithographic behavior.
SP 238	1,500(60C)	1.18	5 Max	
SA 345	23,000	1.07		Full acrylate with TPGDA and HDDA, good adhesion on substrates

Products list for Ink Application

1. Epoxy acrylate

- SE 1701, SE 1701X18

2. Full acrylate or adhesion

- SA 345(PP adhesion etc..), PSP 1723, SPA 2027

3. Flexo ink with low viscosity and fast reactivity

- SP 280, SP 281N, SP 283N

4. Chlorinated polyester acrylate

- SP 236, SP 238

Products : Acrylate based ADITTIVES



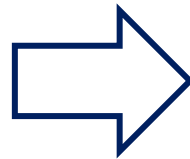
Grade	Viscosity(25C) cPs	Density g/cm3	Properties
SZ 9137	200	1.07	Good leveling, slip, silicon modified acrylate
SZ 225	800	1.10	Amine modified synergist
SZ 9166	2700	1.31	Modified acrylate acidic adhesion promoter

Products : Water Dilutive Acrylate

- No solvent but tap water
- Environmentally friendly
- Safe and easy to control
- Save storage space(1kg sample → 2kg liquid!)
- Stability of storage(20% water type)



Solvent dilution for spray coating



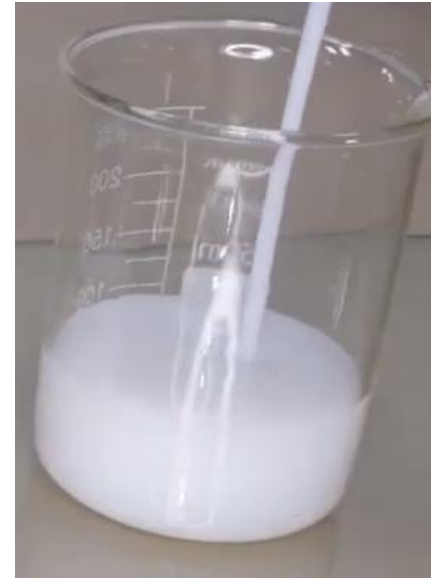
Water dilution for spray coating

Water dilution by 60% or more!

- Water dilutive products includes 20% of water.
- Good stability with by 60% of water dilution
- Diverse viscosity control following needs
- Widely being used in medical, wood, plastics, auto, appliance

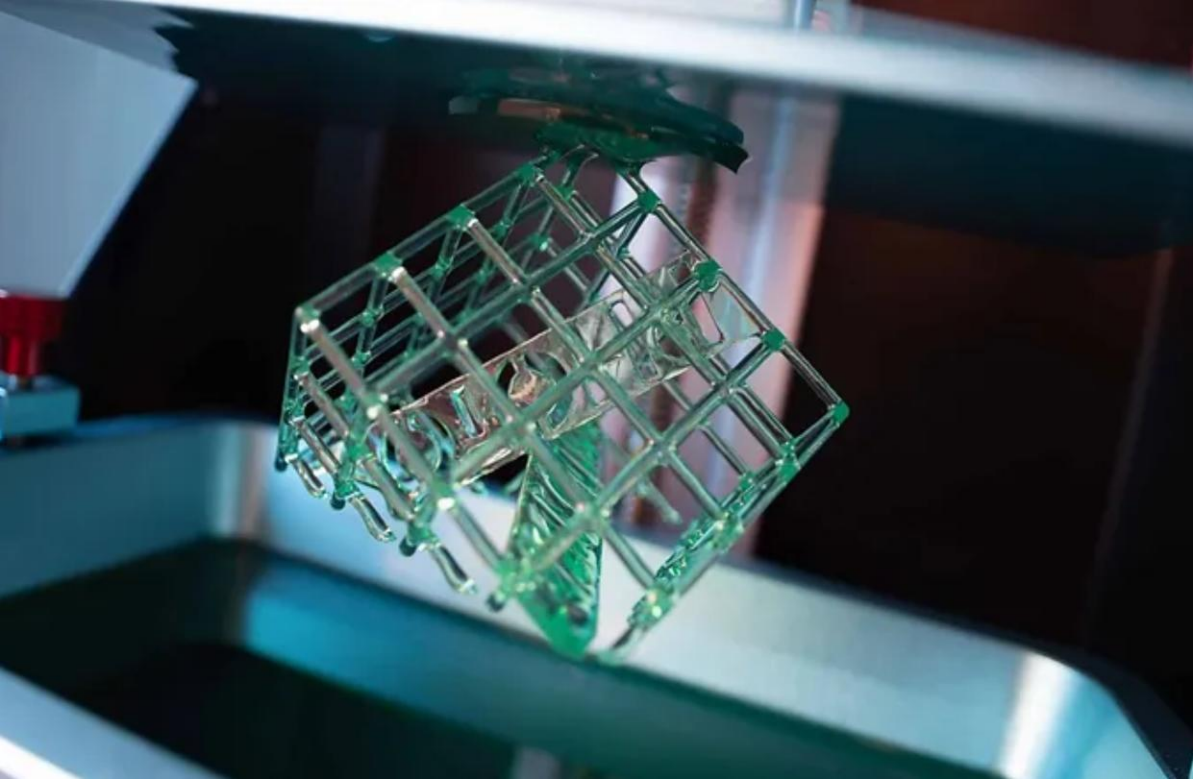
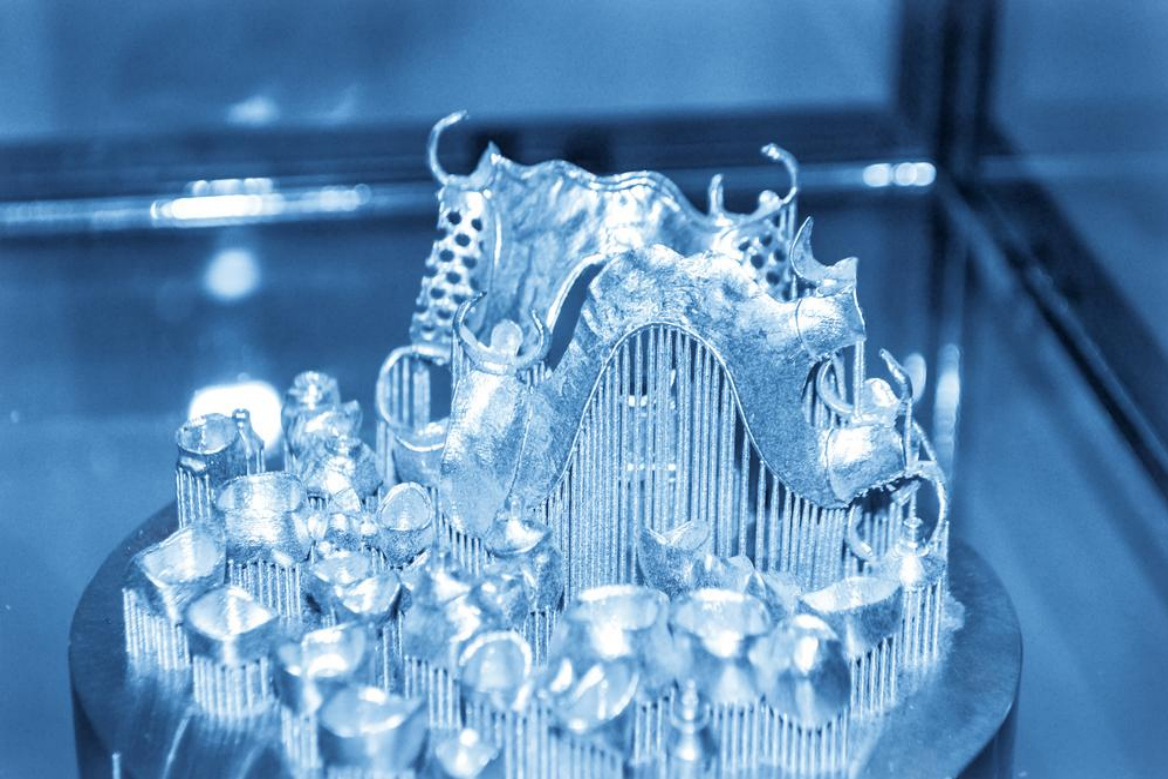


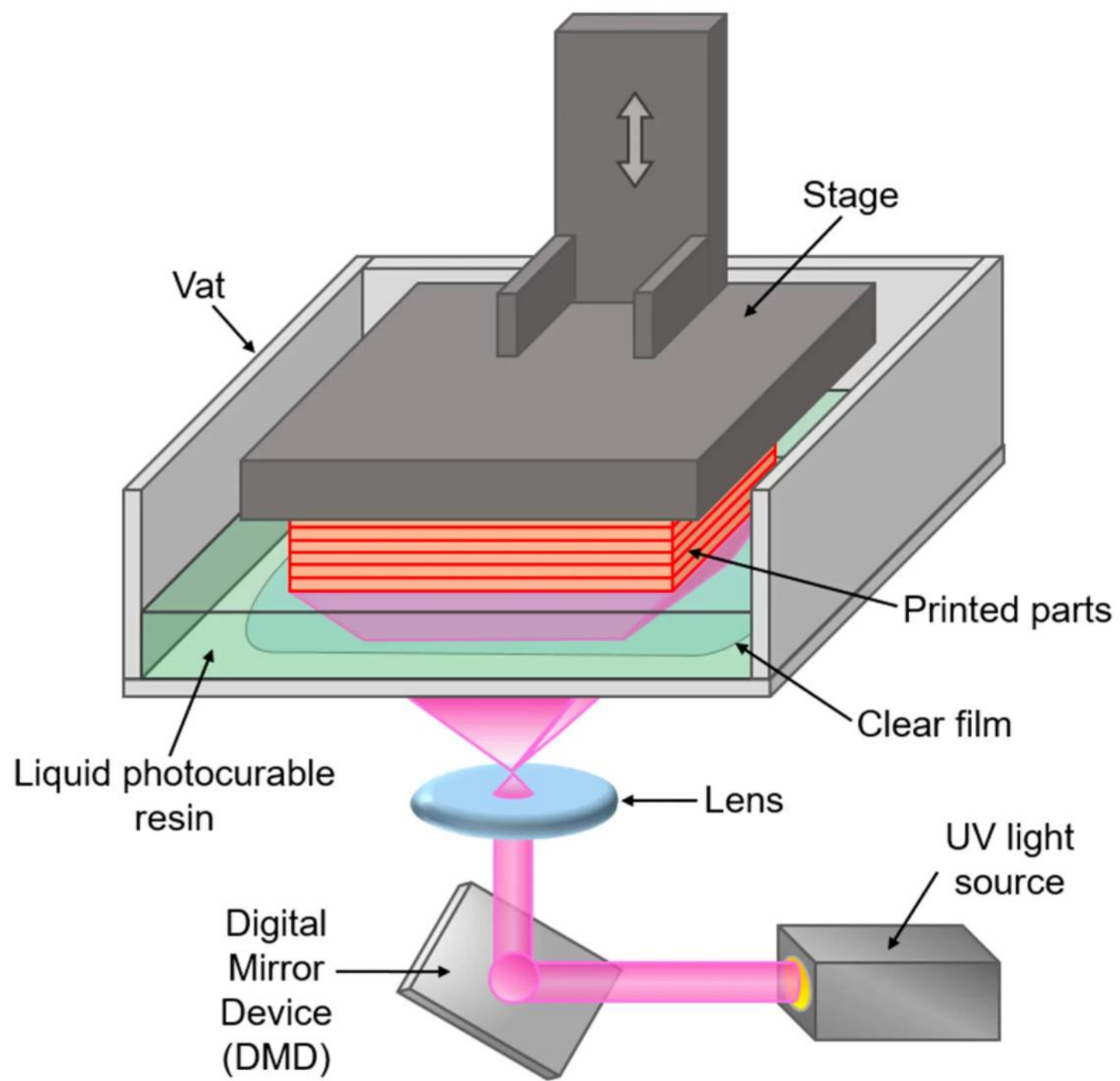
20% water
Original product



60% water
Diluted product

Resins for DLP/SLA 3D printing



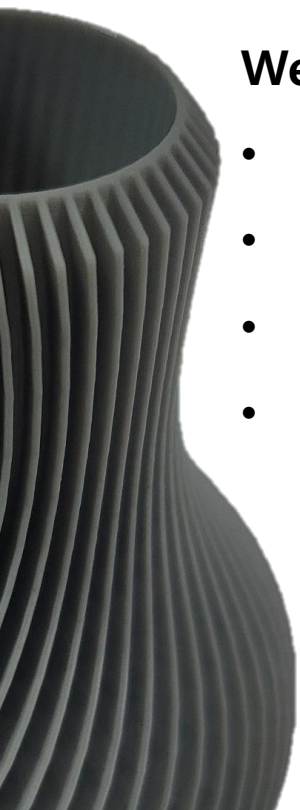


Resins for 3D printing resins

- Standard 3D : low price, fast curing, hard models
- Soft 3D : flexible models
- Tough and Rigid : hard, tough, durable models
- Casting : no residual after burning
- Dental model : 3D model resin for dental

We are on going for...

- Clear and transparent
- Rubber like(industrial)
- Hi temp(HDT over 100C)
- Rigid and strong



Promotional Product List in 2nd Q of 2025 from Soltech Ltd



Acrylate	Products	Info	Details
Epoxy Acrylate	SEA 1110	1,300mPas@60°C	<ul style="list-style-type: none"> • BPA not detected epoxy acrylate • Good balance with toughness and abrasion resistance with proper flexibility
	SEA 1102	1,200mPas@60°C	<ul style="list-style-type: none"> • Modified epoxy acrylate with good balance with flexibility and toughness
	SE 1701	7,500mPas@60°C	<ul style="list-style-type: none"> • Best seller epoxy acrylate with good coated film properties for wide field
Urethane Acrylate	SUA 5543	12,500mPas@60°C	<ul style="list-style-type: none"> • High abrasion resistance of grit feeder method test(used for floor etc.)
	SUA 5457	85,000mPas@60°C	<ul style="list-style-type: none"> • Best di-functional urethane acrylate for adhesion, adhesive and coating
	SUA 5389	1,400mPas@60°C	<ul style="list-style-type: none"> • Modified hexa-functional urethane acrylate with improved abrasion resistance
Polyester Acrylate	SPA 2065	16,000mPas@25°C	<ul style="list-style-type: none"> • Good and strong adhesion on diverse substrates
Additives	SZ 9166	2,500mPas@25°C	<ul style="list-style-type: none"> • Acid based adhesion promotor, not EU REACHed
	SZ 225	800mPas@25°C	<ul style="list-style-type: none"> • Amine synergist for faster curing
	SZ 9137	150mPas@25°C	<ul style="list-style-type: none"> • Silicon based slip agent

Bio raw material based

Recycled raw material use



Straw, PET bottle, others

Bio based raw material use



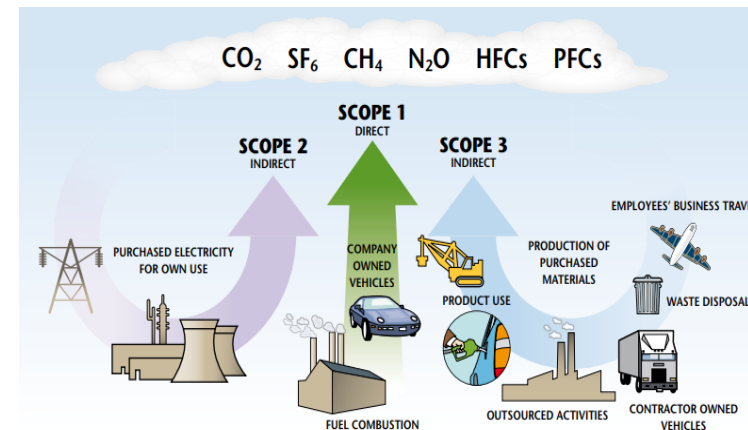
Fossil raw material is running out

Renewable product production



Biodegradation

Carbon footprint chain production



Minimize carbon emissions in the process of raw material production, production, transportation, consumption, and post-consumption waste

Sustainability Story

Soltech is making efforts to provide the following sustainable products support.

- **EU REACH support**

- ✓ Soltech's products are **mainly classified as a polymer** and their raw materials are mostly registered on EU REACH.
- ✓ Soltech is providing **the 3rd party certification** issued EU REACH cover letter on its qualified products for our customers.

- **Bio-based raw material products**

- ✓ Soltech is developing and will provide **bio-content UV oligomers**.
- ✓ For hard coating and primer coating
- ✓ Please contact to us if you are an interested customer.

- **Eco-friendly products**

- ✓ Solvent free, cancer causing material free products
- ✓ BPA free epoxy acrylate
- ✓ RoHS3.0, SVHC, Tin-free, PFOA/PFOS/PFAS free support

Suggestions according to application

Adhesion, adhesive	2-urethane Acrylate	SUA 5457
		SU 5656
		SU 584
	Acrylic Acrylate	SA 345
	Modified urethane Acrylate	SUA 5210A
SUA 5307		
Hard coating	6-urethane Acrylate	SU 571
Nail polish	2-urethane Acrylate	SUA 5605
	3-urethane Acrylate	SU 514
Wood coating	Primer	SWA 8000M5
	Top coating	SUA 5389
Plastics	Primer	SA 345
		SUA 5210A
		SUA 5307
	Top coating	SU 520
		SUA 5187
		SUA 5389
		PSU 867H
	One coating	SCA 6191M2
Ink	Polyester Acrylate	SP 281N
		SP 283N

Alkali strippable	Polyester Acrylate	SP 277
VM	Primer	SUA 5198
	Top coating	SUA 5389
		SUA 5187
		SWA 8003W60
Water base	Primer	SWA 8000M5
		SWA 8084
	Top coating	SWA 8002
		SWA 8016
		SWA 8003W60
Urethane dual cure	NCO bearing	SUA 5280
Adhesion promoter		SZ 9166
surface additives		SZ 9137
Amine synergist		SZ 225
Leather coating		SCA 6176
Plastic one coat		SCA 6191M2
High elongation	2-urethane Acrylate	SUA 5631

Thanks.