



Webinar

17. April 2023

Kevin Westcott



Agenda

Light Curable Materials: Dymax 92xx-W

Dymax 2103-MW

Dymax 1045-M

- Consumer Electronic Wearables

- Medical Wearables

- Prefillable Syringes

Equipment:

Dymax UVCS V3.0

- Conveyor

Light Curable Material

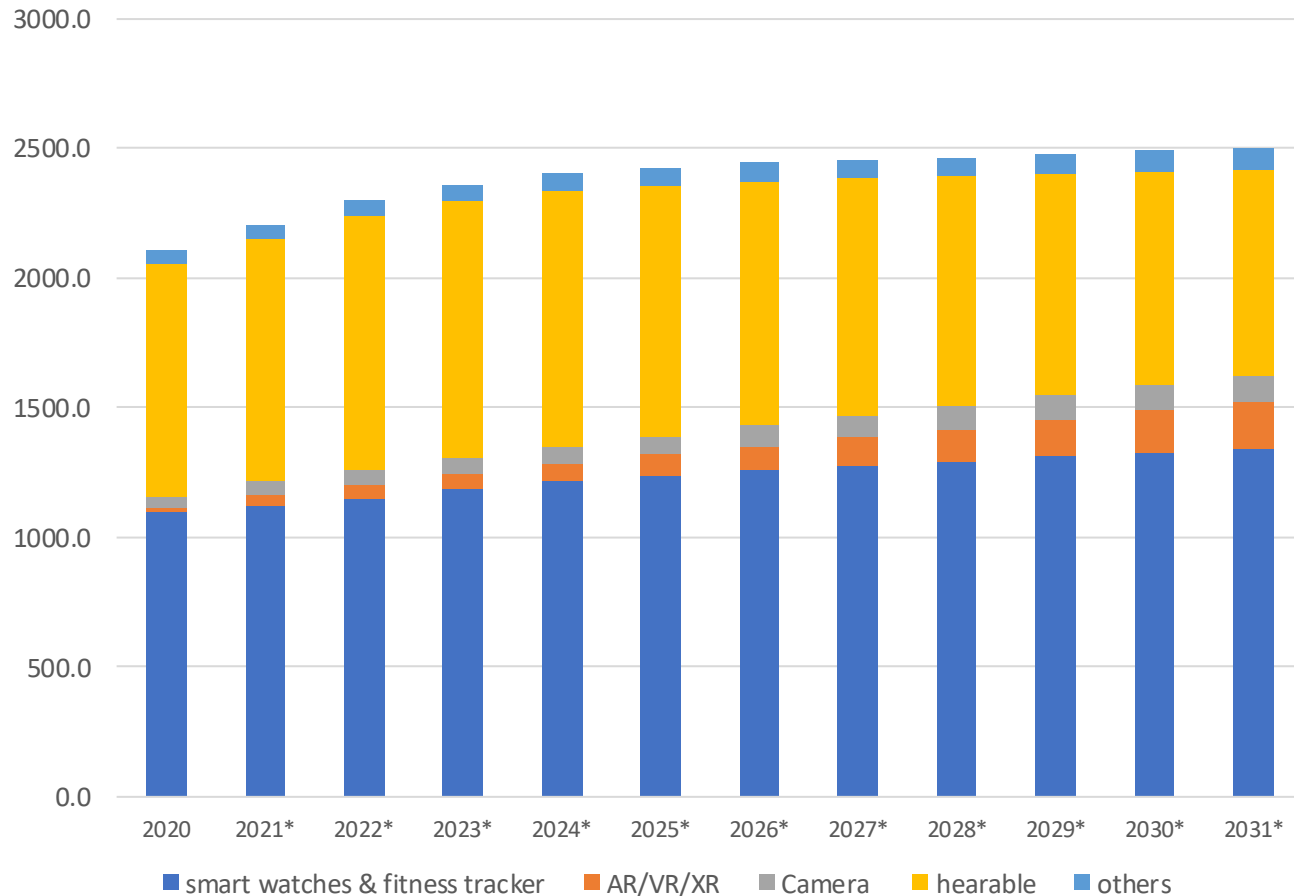
- ➔ Dymax 9200-W series
 - Dymax 2103-MW
 - Dymax 1045-M

Adhesives for Consumer Electronic Wearables

Revenue forecast by sector 2021-203



Sales volume forecast by product type (millions)



Smart Watches & Fitness tracker:

- Standout sector in growth and size through 2019
- Potentially slightly fragile market dominated by a few key players for whom smartwatches are a small part of their overall business
- Slowing of growth over time predicted

AR/VR/XR:

- Modest growth with short/medium term bumpy ride expected
- longer term opportunity as products mature and are released by larger technology players

Hearables (including all headphones and hearing aids):

- Continued expansion also due to excellent recent growth around TWS headphones (true wireless stereo)
- New product innovation expected in the short to medium term

Adhesives for Consumer Electronic Wearables

Why were they developed?

- **NEW 92xx-W Series** developed to meet growing need for materials for **consumer electronics wearable devices**
 - Unlike traditional electronics materials, these are designed with **skin sensitivity** and/or **skin proximity** in mind
 - This is especially important when the device *cannot* be hermetically sealed or based on the customer's restricted substance requirements
- Example applications include:
 - ➔ fitness trackers and smart watches
 - ➔ ear buds and headphones
 - ➔ AR/VR headsets



- **Not intended** for FDA regulated medical devices – please recommend our 2000-MW line of ISO 10993 certified products for those applications
- **Not** a pressure sensitive adhesive (PSA), transdermal, skin patch or direct skin interface material

Adhesives for Consumer Electronic Wearables

Application Examples

Smart Watch



9200-W Series Adhesives Application Areas

1. Selective coating or environmental protection
2. Component encapsulation
3. FPC reinforcement
4. Assembly & sealing enclosures
5. Structural bonding
6. Sensor encapsulation

Smart Glasses

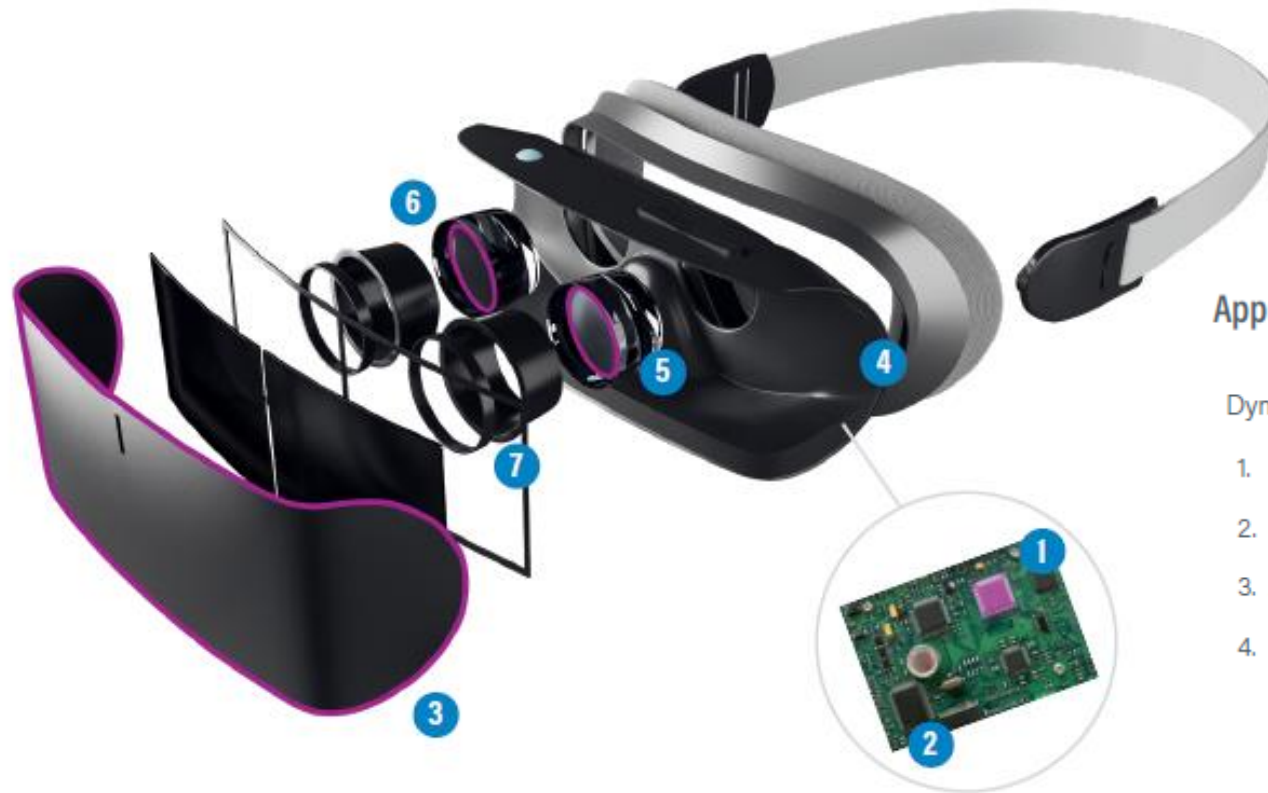


9200-W Series Adhesives Application Areas

1. FPC reinforcement
2. Selective coating or environmental protection
3. Component encapsulation
4. Wire reinforcement/encapsulation
5. Structural bonding
6. Lens bonding
7. Optical positioning

Adhesives for Consumer Electronic Wearables

Application Examples



AR/VR Glasses

Application Areas

Dymax 9200-W series adhesives can be used in a number of applications throughout the device, such as:

- | | |
|--|------------------------|
| 1. Sensor or Component Encapsulation | 5. Optical Positioning |
| 2. Selective Coating or Environmental Protection | 6. Lens Alignment |
| 3. Assembly & Sealing Enclosures | 7. Structural Bonding |
| 4. FPC Reinforcement | |

Consumer Electronic Wearables

Dymax 9201-W

High Viscosity IBOA-free Light + Moisture Cure Encapsulant

Applications:

Chip on board or flex, Wire bond encapsulation, selective protection of components from chemical or environmental exposures, thermal shock, cycling, or vibration

Features

- UV/Visible Light Cure with secondary moisture cure mechanism
- Formulated without IBOA or TPO (RoHS / Halogen Free report available upon request)
- Viscosity: 25,000-40,000 mPas (high thixotropic index)
- Durometer Hardness: A45 (light only) / D20-D40 (light + moisture)
- Storage Temperature 1-5°C / Cold Shipping required 0-10°C

Recommended Surfaces

- FR4, Polyimide (Kapton)



Limited Release

Consumer Electronic Wearables

Dymax 9202-W

Low Shrinkage IBOA-free Adhesive for Optical Positioning

Applications:

Optical Alignment where minimal or no movement is required, Lens Positioning

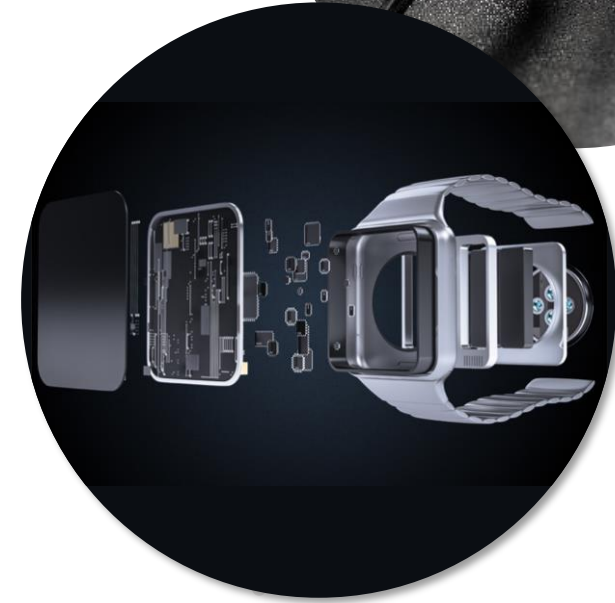
Features

- UV/Broad Spectrum and LED curable at 405nm
- Ideal for applications with full light access or minimal light shadow areas
- Formulated without IBOA
- Viscosity: 200,000 mPas
- Durometer Hardness: D80
- Appearance: light yellow opaque paste

Recommended Surfaces

- Glass, Metals, Ceramics, FR-4, PC

Limited Release



Consumer Electronic Wearables

Dymax 9210-W

High Viscosity IBOA-free Light/Moisture-Cure Encapsulant

Applications:

Selective protection of components from chemical or environmental exposures, thermal shock, cycling, or vibration

Features

- UV/Broad Spectrum and LED curable at – optimized for 405nm
- Secondary moisture cure
- Low sensitizing ingredients (formulated without IBOA)
- Deep depth of cure and fast curing
- Viscosity: 29.000 mPas
- Durometer hardness: D55-D75

Recommended Surfaces

- FR4, Copper, Kapton, PCBs and plastics

Limited Release



Consumer Electronic Wearables

Dymax 9211-W

LED-curable IBOA-free Adhesive for Camera module Assembling

Applications:

CCM Assembly, Camera Module Barrel Fixtures (Structural Assembly), Plastic Assembly

Features

- UV/Broad Spectrum and LED curable
- Formulated without IBOA
- Low stress/low shrinkage plastic bonder
- Viscosity: 20.000 mPas
- Durometer Hardness: D63

Recommended Surfaces

- LCP, PC, PS, FR4, ABS

Limited Release



Consumer Electronic Wearables

Comparison to Current Dymax Portfolio



	Light + Moisture Curable	Light Cure Only	LED Optimized	Encapsulation	Optical Positioning	General Bonding	Cold storage	IBOA Free	TPO free
9201-W	✓		-	✓	-	✓	✓	✓	✓
9202-W	-	✓	-	-	✓	-	-	✓	✓
9210-W	✓		365 /405	✓	✓	✓	✓	✓	✓
9211-W	-	✓	365 / 385 / 405	-	✓	✓	-	✓	✓

Consumer Electronic Wearables

AR/VR Devices Application and Commercial Materials

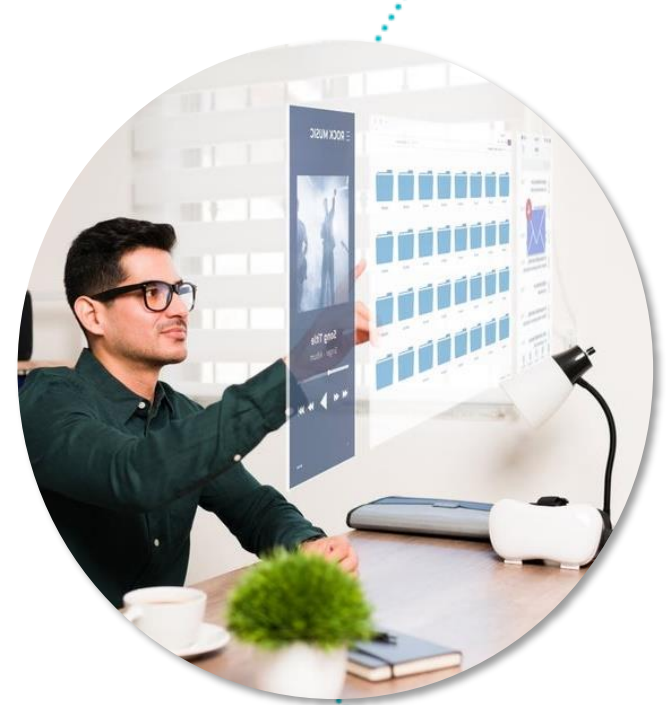
	Application	Product Requirement	Dymax Recommendation
Antenna & Other Modules	PCB/FPC Module assembly	FPC encapsulation PCB encapsulation Reinforcement	9201-W (encapsulation) 9210-W (encapsulation)
Optical Modules	Lidar TOF Camera module	Active alignment Black matte Reinforcement Structure Adhesive Light & Light + Moisture	9202-W (Active Alignment) 9211-W (bonding)



Consumer Electronic Wearables

Timing & Availability & Outlook

Dymax 9201-W: Encapsulant	30ml syringe	Limited Release
Dymax 9202-W: Positioning Adhesive	30ml syringe	Limited Release
Dymax 9210-W: Encapsulant	30ml syringe	Limited Release
Dymax 9211-W: Adhesive	30ml syringe	Limited Release



 **Dymax 92xx-W family will be extended in 2024**

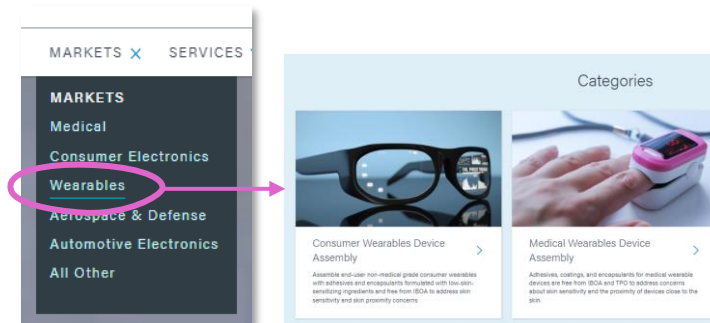


Consumer Electronic Wearables

Marketing Support

Website

- New “Market” for Wearables
 - New Consumer Wearable Device Section and product pages
 - Video



Literature

- [Application Bulletin](#)
- [Selector Guide for Consumer Electronics Assembly](#)
- [Selector Guide for Electronics Assembly](#)
- [Info graphic: Safer Wearable Devices](#)
- [Press Release 9200-W series](#)

PDS

- [9201-W Encapsulant](#)
- [9202-W Optical Positioning](#)
- [9210-W Encapsulant](#)
- [9211-W Adhesive](#)



Light Curable Material

- Dymax 9200-W series
- ➔ Dymax 2103-MW
- Dymax 1045-M

Materials for Medical Wearable Assembly

Dymax 2000-MW Series

- First of its kind dedicated series of products for assembling medical wearables
- Designed to address sensitivity concerns when proximity to skin matters
 - Certified to Biocompatible 10993-5 Cytotoxicity Standards
 - Pass ISO 10993-10 Skin Irritation and Sensitization
- Formulated without IBOA and TPO

➡ NEXT GENERATION: Free of CMR and H317 monomers

- High reliability on a variety of substrates
- Cure using LED or UV/Visible light

Challenges:

- ➡ On body for extended periods of time: in **proximity to skin** for prolonged periods (>24 hours)
- ➡ Skin sensitizers are restricted / prohibited ⇔ ISO 10993-10 irritation and/or sensitization required
- ➡ Other materials of concern



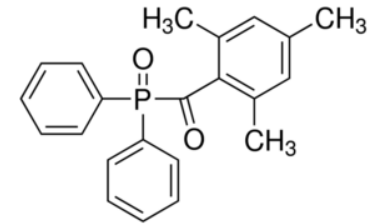
Substances of Concern

CMR – Substances = Carcinogenic, Mutagenic, Reprotoxic (GHS classification: H340, H341, H350, H351, H360, H361, H362)

are chemical substances (or mixtures) of specific concern due to the long term and serious effects that they may have on human health.

TPO = Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide – Photo initiator

is classified as CMR substance captured within REACH Criteria for the Identification of SVHC (substances of very high concern) and was raised as a reproductive toxin through ECHA, suspected of causing damage to fertility or the unborn child



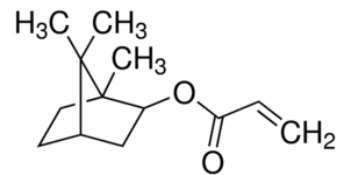
H317 – Monomers = May cause an allergic skin reaction – Sensitization Category 1 / 1A / 1B



Warning

IBOA = Isobornyl Acrylate - Monomer

was identified as the culprit allergen causing adverse skin reactions such as severe allergic contact dermatitis (ACD) in some continuous glucose monitors and other medical devices with prolonged direct exposure to the skin in 2017



Medical Wearables Assembly

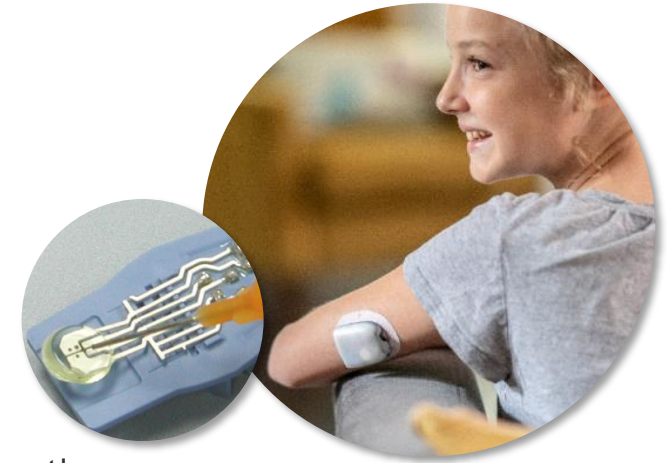
Dymax 2000-MW Series

Dymax MD[®] 2022-MW

Moisture Resistant Adhesive for Multiple Substrates

Ideal for general bonding, encapsulation, and coating; autoclave resistant for 100+ cycles; low water absorption

Applications: Sensor Potting/Encapsulation, Housing Assemblies, Medical Smart Devices, Medical Monitoring Devices, Large Volume Injectors



Dymax MD[®] 2101-MW-UR

LED-curable Adhesive for Medical Wearables with Ultra-Red[®] Fluorescing

Ideal for general bonding of medical wearables; adhesion to a variety of substrates including PC, PVC, TPU

Applications: Medical Smart Device Assembly, Patient Monitoring Devices, Large Volume Injectors, Continuous Glucose Monitors, Diabetes Care Monitors

Dymax MD[®] 2103-MW-UR

LED-curable Adhesive for Medical Wearables with Ultra-Red[®] Fluorescing

Ideal for general bonding of medical wearables; intended for plastics and some metals; low water absorption

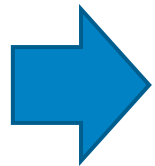
Applications: Medical Smart Device Assembly, Hearable Devices, Wearable Injectors, Diabetes Care Monitors, Sleep Monitor Devices, Pain Management Devices



Medical Wearables Assembly

Extended Product Portfolio

Product	10993-5 Cytotoxicity	10993-10/-23 Irritation	10993-10 Sensitization	IBOA free	TPO free	Formulated without CMR	H317 listed on PDS
2022-MW	●			●	●		photoinitiator & two monomers
2101-MW-UR	●	●	●	●	●		photoinitiator & one adhesion promotor
2103-MW-UR	●	●	●	●	●	●	photoinitiator only



In all cases above, remaining H317 are **NOT A CONCERN** if material is cured properly
– as evidenced by passing sensitization and irritation testing with cured material



Medical Wearables Assembly

Dymax MD[®] 2103-MW-UR

LED-Curable Moisture Resistant Adhesive with Ultra-Red[®] Fluorescing

Applications

- Smart Devices, Hearing Aids, Patient Monitoring Devices, Diabetes Care Monitors, Wearable Injectors

Features

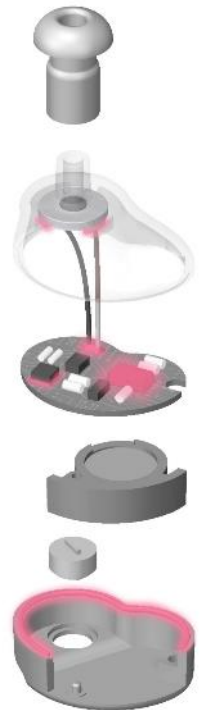
- **H317 Monomer and CMR Free**
- 365nm LED Optimized, 405/385nm Compatible
- Extremely low water absorption (<0.3%)
- Ultra-Red[®] Fluorescing
- Viscosity: 5.500 cP
- Hardness: D70

Recommended Surfaces

- PC, ABS, PVC, Pebax, SS

Biocompatibility

- ISO 10993-5 Cytotoxicity
- ISO 10993-23 Intracutaneous Irritation
- ISO 10993-10 Sensitization



Medical Wearables Assembly

Dymax 2000-MW Series



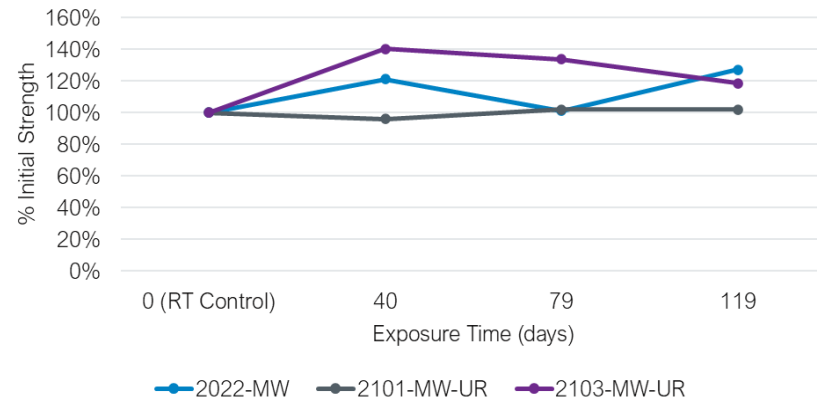
Product	2022-MW	2101-MW-UR	2103-MW-UR
Appearance	Colorless to Light Yellow	Colorless to Light Yellow	Colorless to Light Yellow
Fluorescing	None	Ultra-Red® Fluorescing	Ultra-Red® Fluorescing
Physical Properties			
Viscosity (cP)	750	5,500	5,500
Hardness	D60	D77	D70
Water Absorption, % (25°C, 24 hr)	0.5	2.1	0.1
Boiling Water Absorption, % (100°C, 2 hr)	1.6	4.5	0.25
Tensile at Break, MPa [psi]	19.3 [2,800]	24.8 [3,600]	13.8 [2,000]
Elongation, %	25	80	20
Modulus of Elasticity, MPa [psi]	620.5 [90,000]	1,020.4 [148,000]	448.2 [65,000]
Glass Transition Tg, °C	99	99	122
Curing Parameters			
Recommended Cure	Broad Spectrum	405nm LED	405nm LED
Alternative Cure Options	365nm LED	Broad Spectrum, 365/385 nm LED	Broad Spectrum, 365/385 nm LED
Other Features			
Recommended Substrates	ABS, PC, PETG, AI, SS	PC, PVC, TPU	ABS, PC, PVC, SS, TPU
Noteworthy Special Features	Depth of Cure up to 38 mm (1.5")	Tough (high modulus & elongation)	Rapid Cure
Shelf Life	9 months	7 months	7 months
Storage	10°C (50°F) – 32°C (90°F)	10°C (50°F) – 32°C (90°F)	10°C (50°F) – 32°C (90°F)

Medical Wearables Assembly

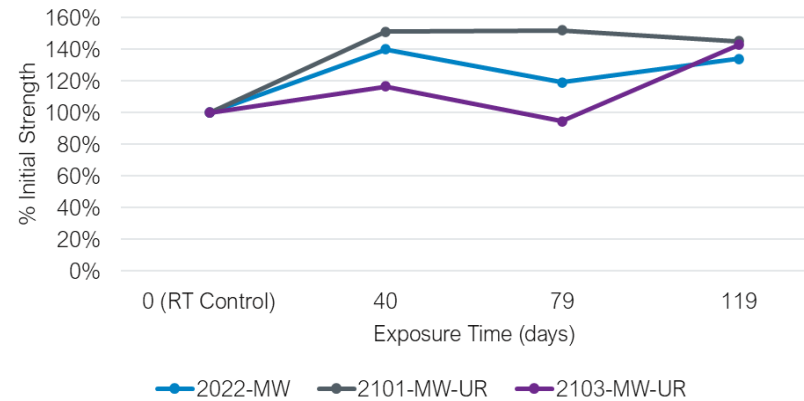
Dymax 2000-MW Series – Aging Test Results



54°C Dry Heat - PC to PC Lap Shear



54°C Dry Heat - PC to SS Lap Shear

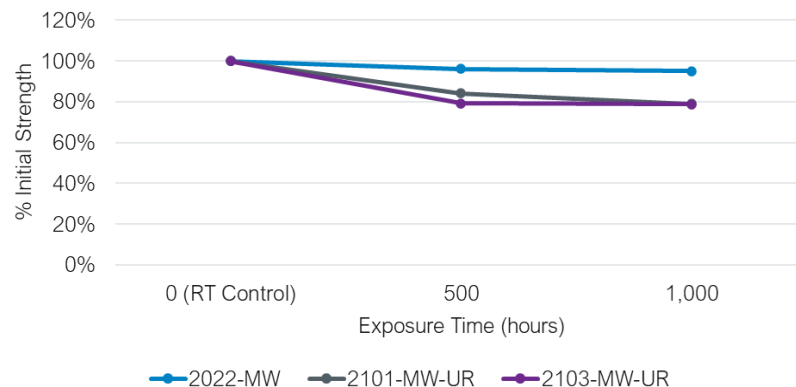


54°C Dry Heat Accelerated Aging Evaluation

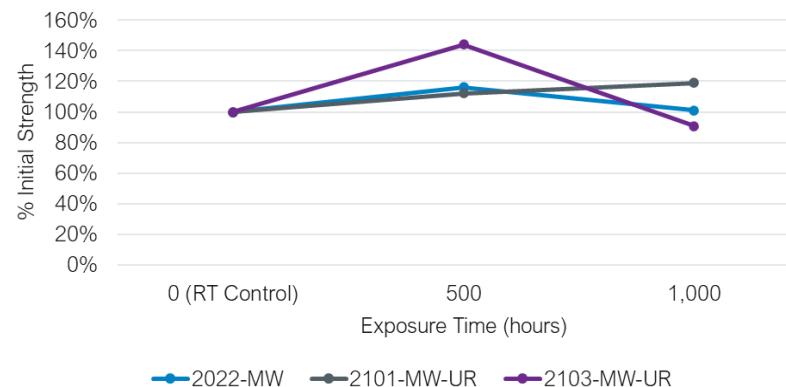
Lap Shear (Dymax Lab Evaluation)

- Substrates: PC to PC and PC to Stainless Steel
- Cure: 5000-EC (230 mW/cm²) for 30 sec
- Aged at 54°C for: 40 days, 79 days, and 119 days to simulate 1-, 2-, and 3- year aging respectively Q10 coefficient of 2

45°C / 95% R.H. - PC to PC Lap Shear



45°C / 95% R.H. - PC to SS Lap Shear



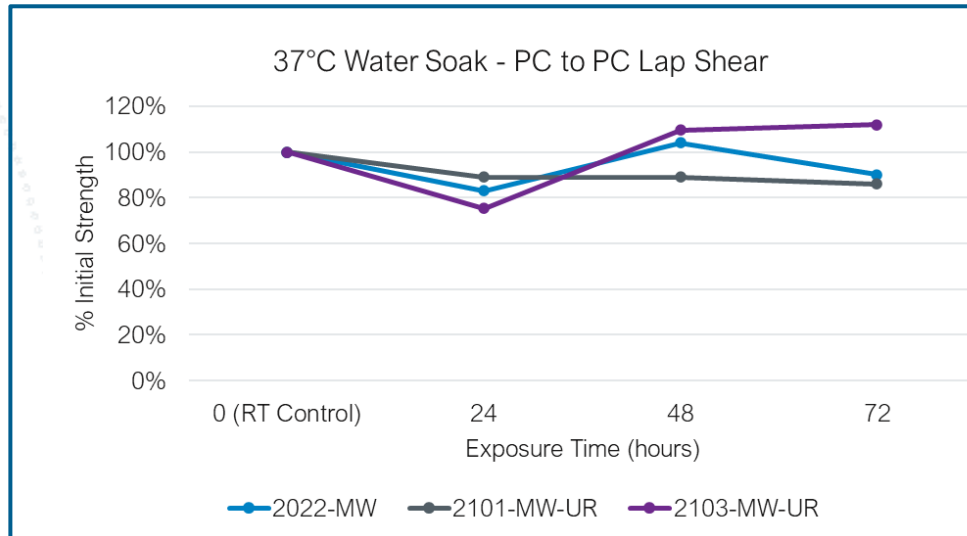
45°C/95% R.H. High Humidity Aging Evaluation

Lap Shear (Dymax Lab Evaluation)

- Substrates: PC to PC and PC to Stainless Steel
- Cure: 5000-EC (230 mW/cm²) for 30 sec
- Aged at 45°C / 95% R.H. for a total of 1,000 hours

Medical Wearables Assembly

Dymax 2000-MW Series – Water Soak Result



37°C Water Soak Evaluation

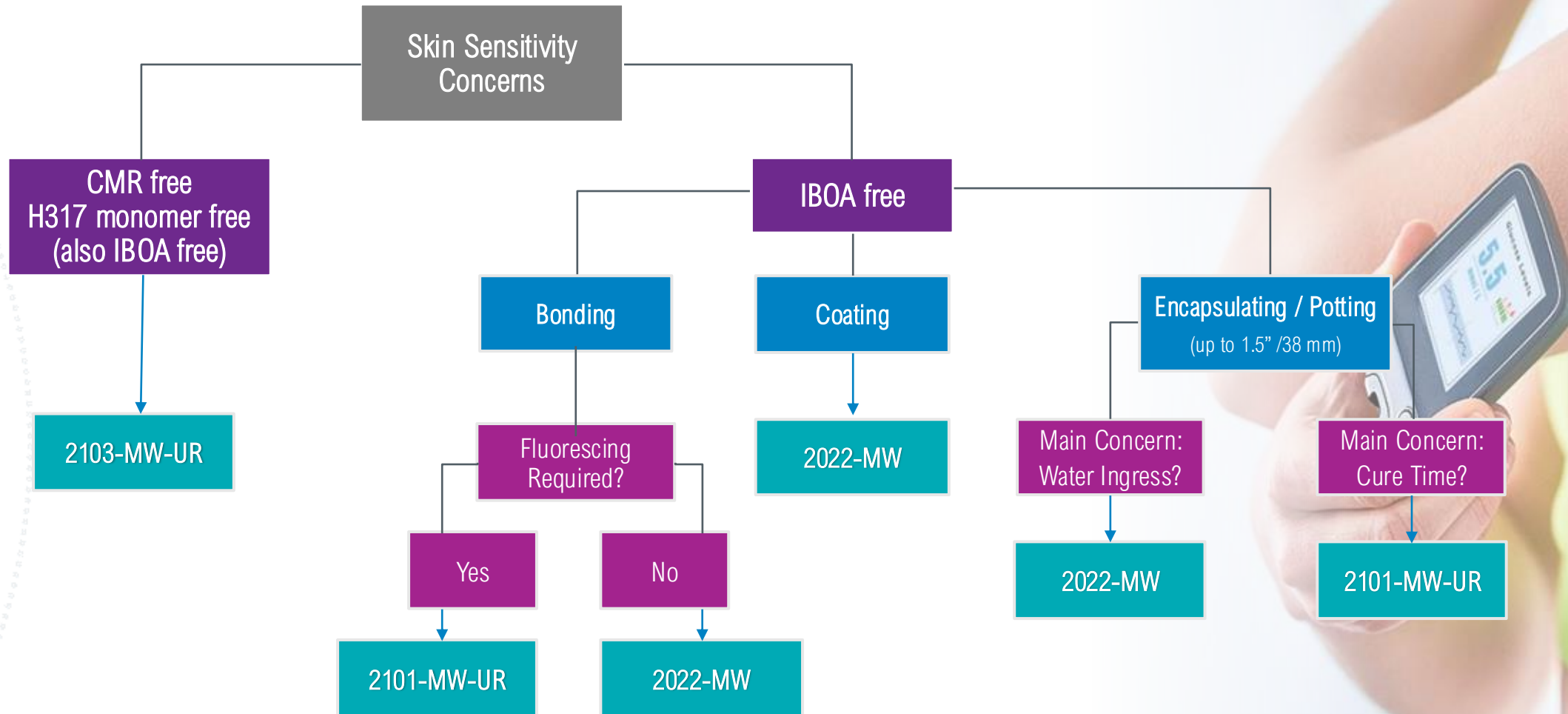
Lap Shear (Dymax Lab Evaluation)

- Substrates: PC to PC
- Cure: 5000-EC (230 mW/cm²) for 30 sec
- Soaked in water maintained at 37°C for total of 72 hours



Medical Wearables Assembly

Dymax 2000-MW Series - Decision Tree



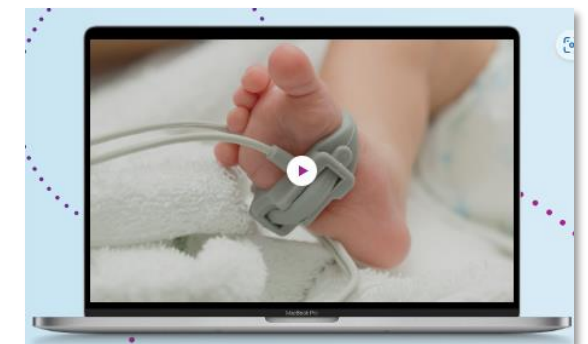
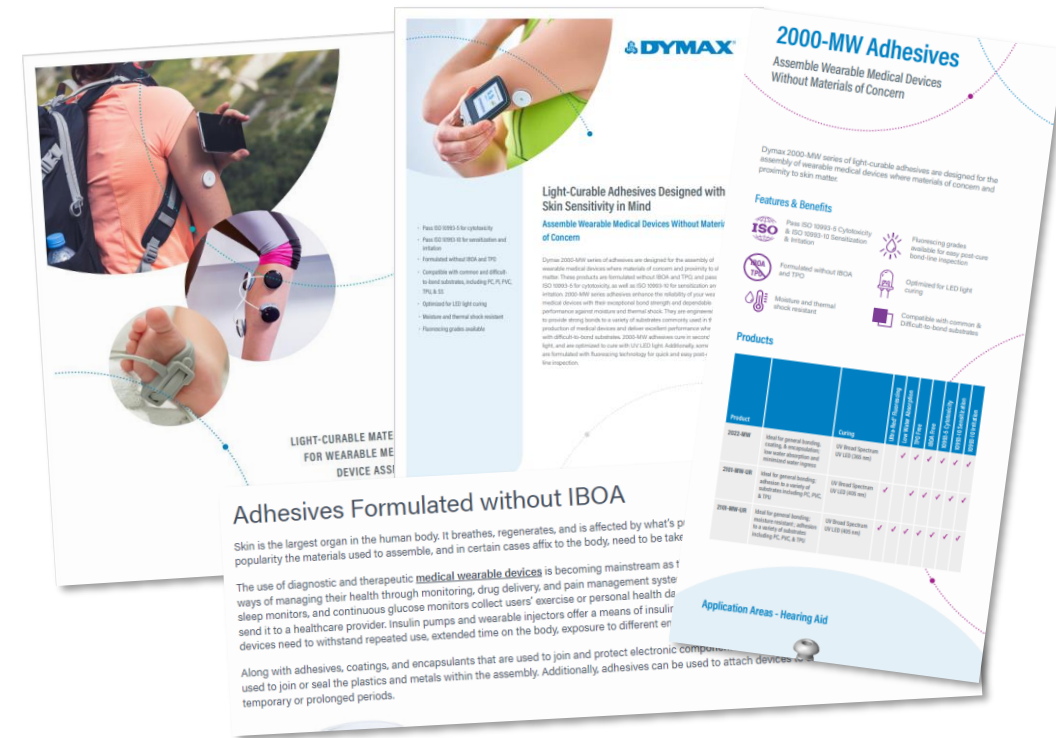
Medical Wearables Assembly Dymax MD[®] 2000-MW-series

Available product sizes:

10ml syringes
30ml syringes

MarCom Support:

- PDS for download
- [Selector Guide for Wearable Medical Device Assembly](#)
- [Application Bulletin](#)
- [Info Graphic: 2000-MW Adhesives](#)
- [Video](#)
- [Blog: The importance of formulating adhesives without IBOA](#)
- [Product Page on Dymax Website](#)
- ISO 10993 Test Report (upon request)



Medical Wearables Assembly Outlook



Dymax MD[®] 2105-MW-UR

LED-Curable Adhesive with Ultra-Red[®] Fluorescing for difficult to bond substrates

- H317 Monomer Free & CMR Free
- Adhesion to “difficult to bond” substrates like Polyimide (Kapton) and Ni-Plated SS as well as general plastics and metals
- *Recommended replacement for any applications that may have been considering 2021-MW*



Target timing for limited release: Q2 / 2023



Dymax MD[®] 2107-MW-UR

LED-Curable Adhesive for Catheter bonding



Target timing for limited release: 2024

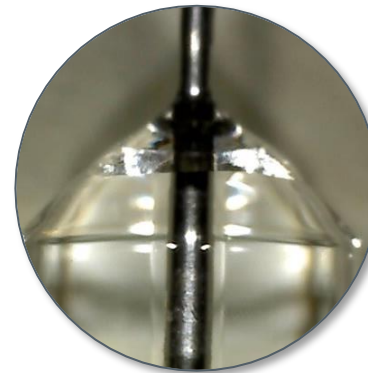


Light Curable Material

- Dymax 9200-W series
- Dymax 2103-MW
- ➔ Dymax 1045-M

Prefillable Syringe Adhesive Objectives

- Increase production inline with reduced processing times
 - Flow in under 10 sec (vs 30+ sec current standard)
 - **LED-Cure** in 5 sec (vs 15+ sec current standard)
- Meet pull-force requirements
 - Excellent adhesion to SS and glass
 - Withstand **pre-cleaning** (ex., 1 cycle autoclaving, typically before filling)
 - Withstand **sterilization** (Gamma and ETO, typically after filling) and aging
- Meet quality requirements
 - Low shrinkage
 - Resistance to yellowing
 - Glass-like cured surface
- **Low extractables** & pass cytotoxicity



Prefillable Syringe Adhesive

Proposed Applications

- Prefillable Syringes



- Autoinjectors



- Wearable Injectors



Prefillable Syringe Adhesive

Dymax 1045-M

Multipurpose Adhesive for Prefillable Syringes and Injection Devices

Applications

- **Glass Prefillable Syringes**, Pen Injectors, Auto Injectors, Wearable Injectors, Single-Use Devices

Features

- UV/Broad Spectrum and LED curable at 365nm
- Very Low Extractables
(extractable information available upon request: GB/T 14233.1-2008)
- Non-yellowing, colourless appearance
- Viscosity: 525 mPas
- Durometer Hardness: D78

Recommended Surfaces

- Glass, SS, ABS, PC

Biocompatibility

- ISO 10993-4: Hemolysis
- ISO 10993-5: Cytotoxicity
- ISO 10993-6: Muscle Implantation
- ISO 10993-10: Intracutaneous Irritation
- ISO 10993-11: Systemic Toxicity

Extractable

- GB/T 14233.1-2008
 - Chinese standard specifies the chemical analysis methods for infusion, transfusion, injection equipment for medical use
 - Based on guidance from FDA DMF requirements



Prefillable Syringe Adhesive

Dymax 1045-M

Multipurpose Adhesive for Prefillable Syringes and Injection Devices



Product	1045-M
Chemical Class	Acrylated Urethane
Component	One Component
Appearance	Colorless to Light Yellow
Physical Properties	
Viscosity (cP)	475 (nominal)
Durometer Hardness	D78
Boiling Water Absorption, % (2 h)	3.8
Water Absorption, % (25°C, 24 h)	1.0
Linear Shrinkage, %	0.3
Glass Transition T_g , °C	61
Tensile at Break, MPa [psi]	23.4 [3,400]
Elongation at Break, %	20
Modulus of Elasticity, MPa [psi]	1,861.6 [270,000]

Extractable Information available upon request: GB/T 14233.1-2008

Test Methods for Infusion, Transfusion, and Injection Equipment for Medical Use

Part 1 : Chemical Analysis Methods

- 5.1.1 Turbidity
- 5.1.2 Color
- 5.2.2 Reducing Substance
- 5.3 Chloride
- 5.4.1 PH
- 5.5 Evaporation Residual
- 5.6.1 Total Content of Heavy Metals
- 5.8 Ammonium

Additional Parameters	
Curing Method	Broad Spectrum, 365nm LED
Storage	10°C (50°F) – 32°C (90°F)
Shelf Life	7 months from DoM

Prefillable Syringe Adhesive

Dymax 1045-M

Multipurpose Adhesive for Prefillable Syringes and Injection Devices

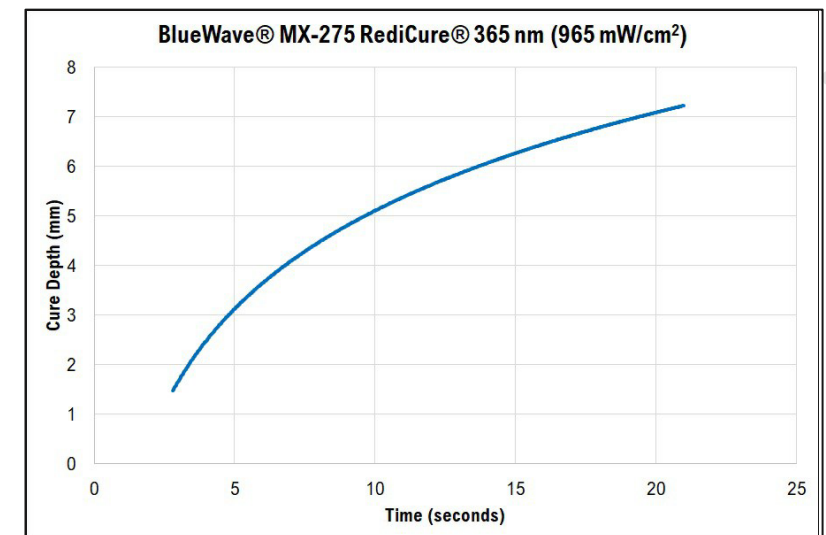
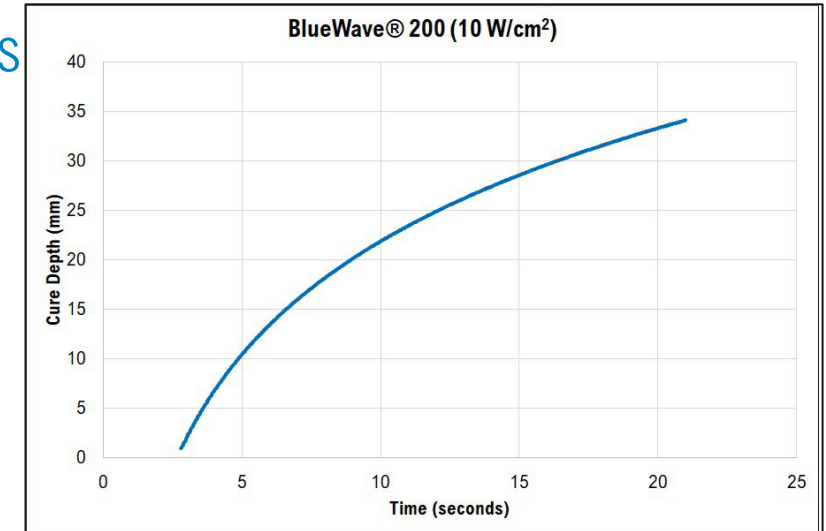
Dymax Curing System (Intensity)	Fixture Time or Belt Speed ^A
5000-EC (200 mW/cm ²) ^B	2 s
BlueWave [®] AX-550 RediCure [®] 365 nm (425 mW/cm ²) ^C	1.6 s
BlueWave [®] MX-275 RediCure [®] 365 nm (965 W/cm ²) ^C	1.4 s
BlueWave [®] 200 (10 W/cm ²) ^B	1.4 s
BlueWave [®] MX-150 RediCure [®] 365 nm (15 W/cm ²) ^C	1.6 s

^A Fixture times/belt speeds are typical for curing thin films through 100% UV and light-transmitting substrates.

Light-obstructing substrates may require longer cure times.

^B Intensity was measured over the UVA range (320-395 nm) using a Dymax ACCU-CAL[™] 50 Radiometer.

^C Intensity was measured over the UVA/Visible range (350-450 nm) using a Dymax ACCU-CAL[™] 50-LED Radiometer.



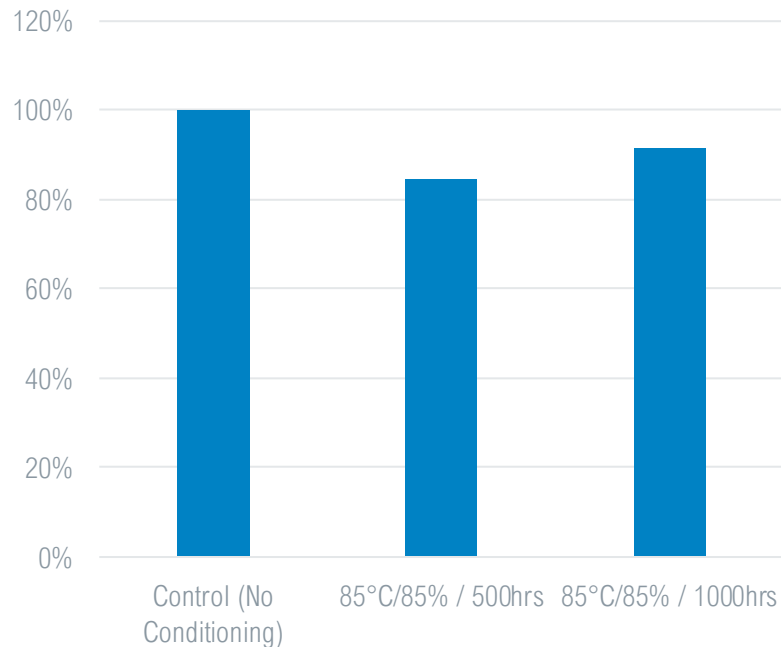
Prefillable Syringe Adhesive

Dymax 1045-M

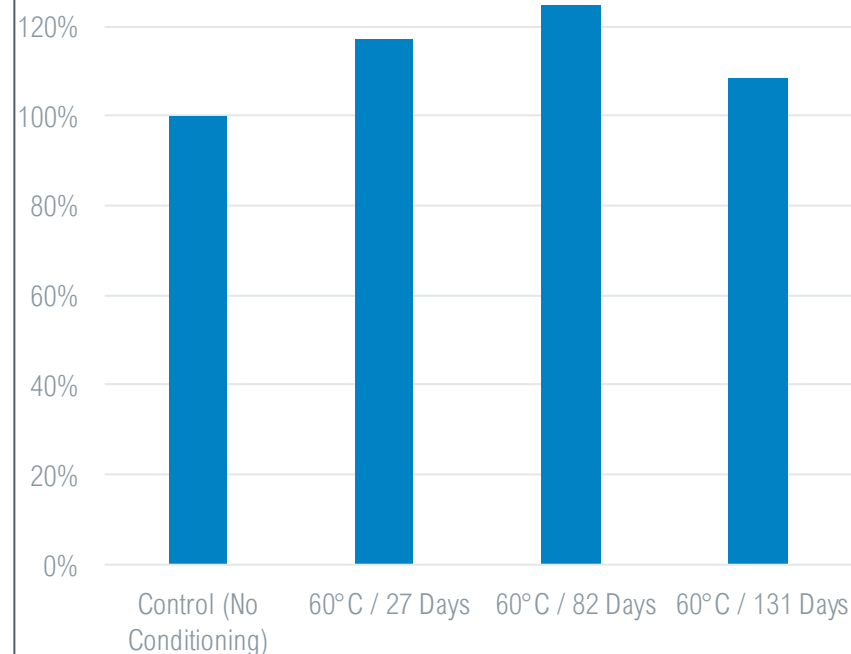
Multipurpose Adhesive for Prefillable Syringes and Injection Devices



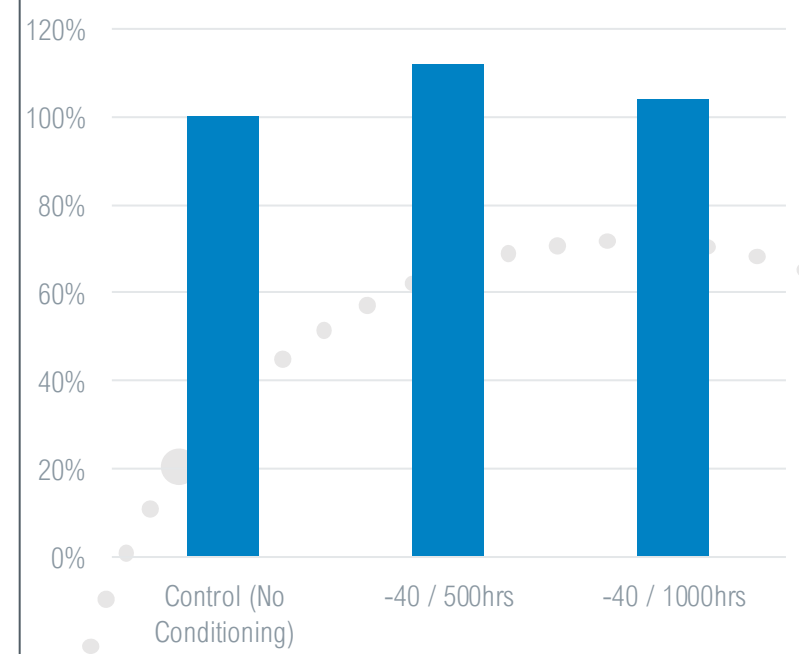
Glass Syringe to SS Cannula
85°C/85% R.H. exposure



Glass Syringe to SS Cannula
60°C accelerated aging



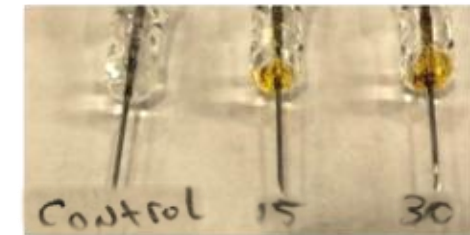
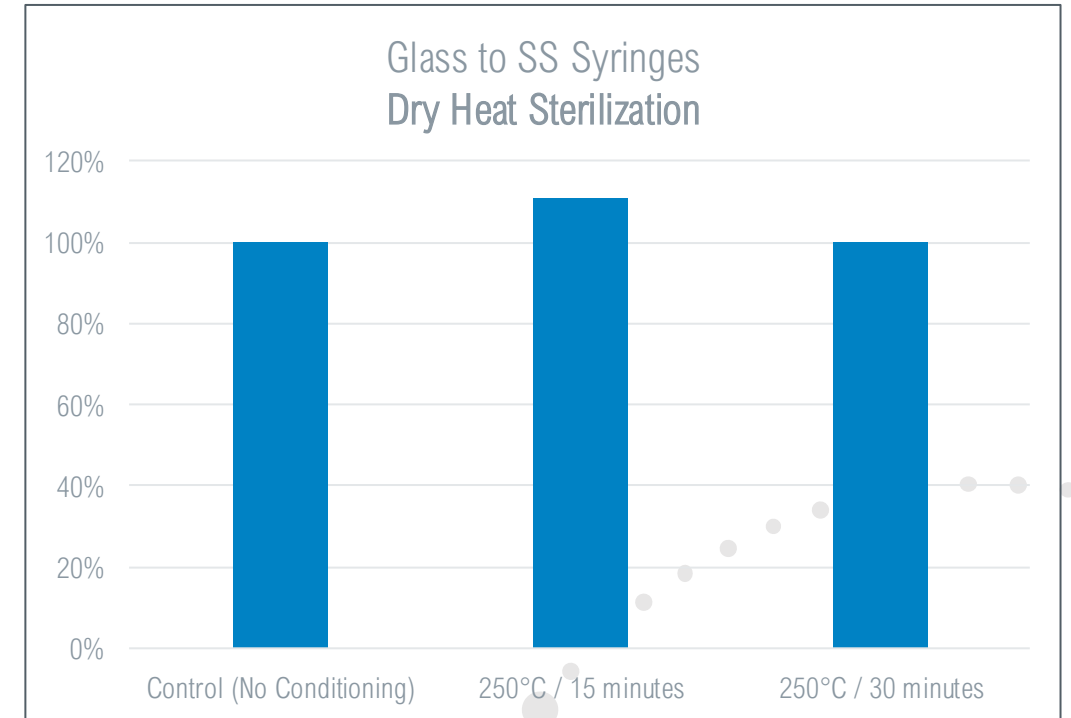
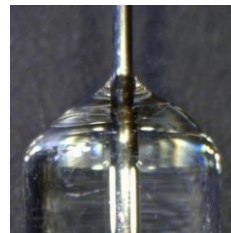
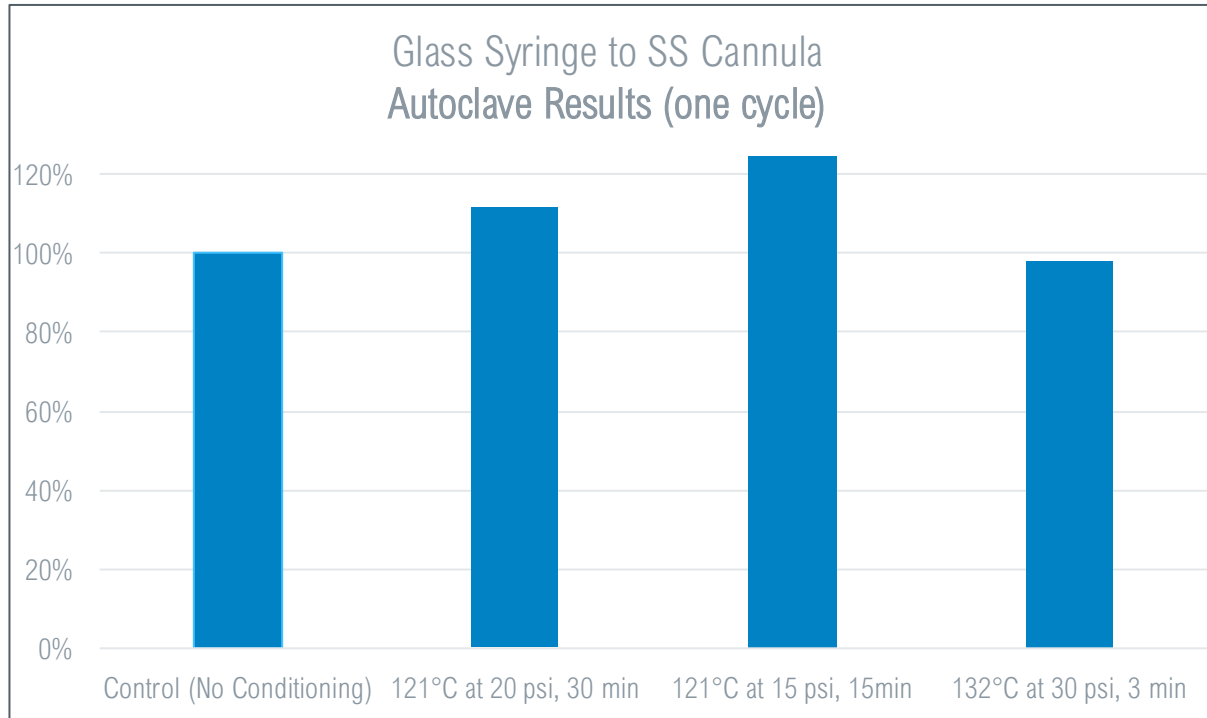
Glass Syringe to SS Cannula
-40° storage simulation



Prefillable Syringe Adhesive

Dymax 1045-M

Multipurpose Adhesive for Prefillable Syringes and Injection Devices



Prefillable Syringe Adhesive

Dymax 1045-M

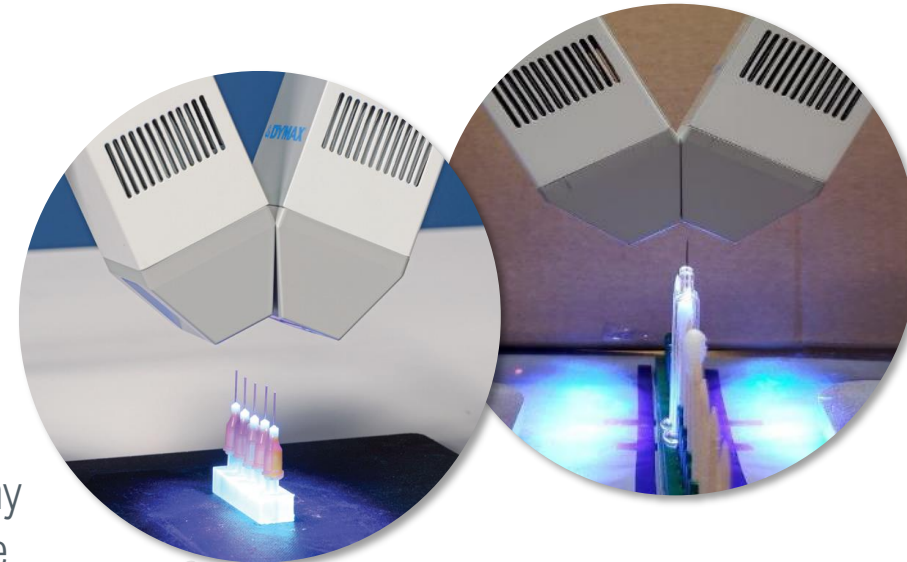
Multipurpose Adhesive for Prefillable Syringes and Injection Devices

System Integration Options:

- ➔ compatible with standard broad spectrum to integrate into existing lines, or
- ➔ compatible with 365nm UV-LED for line updates
- ➔ **MX-275** emitters provide a high intensity “light bar” perfect for integrating into large production lines
 - emitters can be chained together to provide total coverage as the line travels
 - allows flexibility in line speed by simply adding additional emitters
- ➔ System Integration can work directly with manufacturers or line builders to overcome any concerns or challenges they are facing in implementing a light curing or LED curing line



line evaluation, glass syringes traveling under a single light bar



lab evaluation, syringes with 2 x MX-275 emitters

Prefillable Syringe Adhesive

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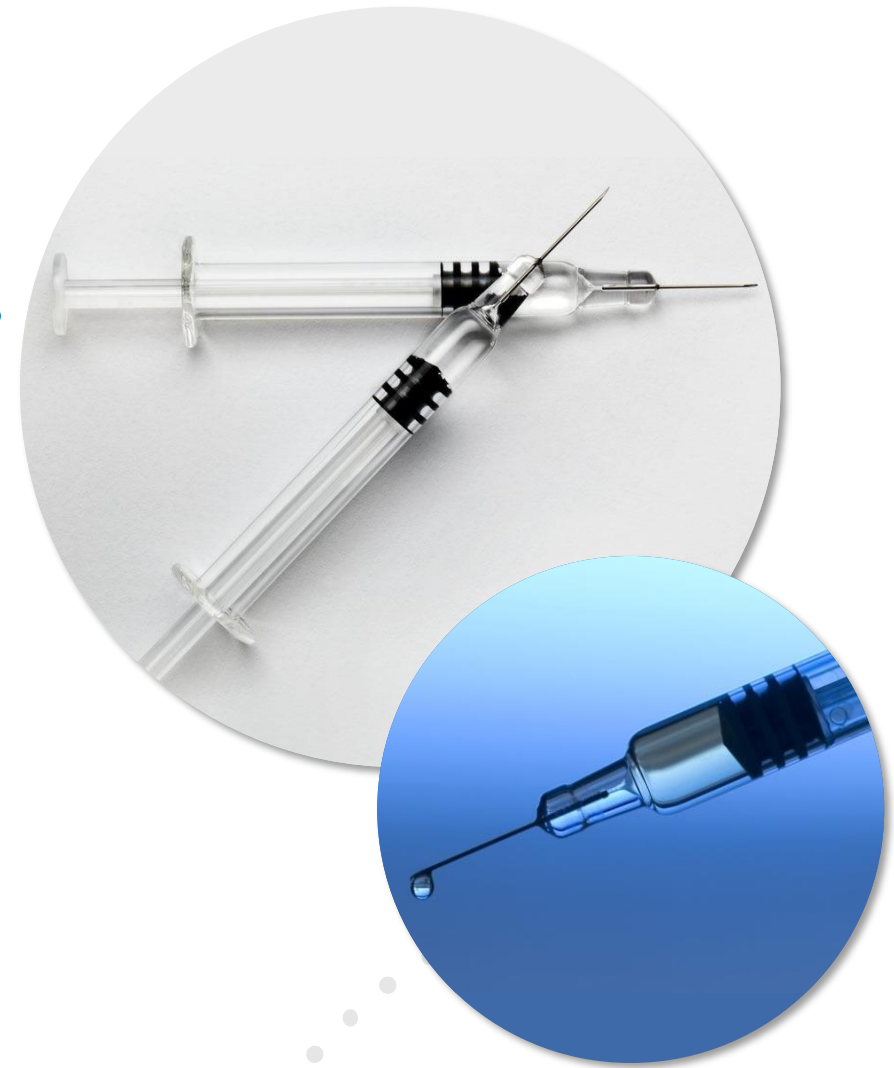
Multipurpose Adhesive for Prefillable Syringes and Injection Devices

Available product size:

- 10ml syringes
- 30ml syringes

MarCom Support:

- [PDS Dymax 1045-M](#)
- [Press Release](#)
- [Medical Selector Guide](#)
- [Product Page on Dymax Website](#)
- ISO 10993 Test Reports (available upon request)



Light Curable Material

- Dymax 9200-W series
 - Dymax 2103-MW
 - Dymax 1045-M
- ➔ New Dymax Technology to come soon

NEW Dymax Development

Hybrid Light Curing Technology – HLC adhesives



➔ Patent Pending technology combines cyanoacrylate & acrylate chemistry

Cyanoacrylate Chemistry

- Fast bonding in seconds upon substrate contact
- Strong bond (in shadowed areas)
- Substrate versatility: metals, glass, and plastics
- High bond strength to adhesive ratio: a little goes a long way



Light Curing (Acrylate) Chemistry

- Provides a crosslinked 'lattice' network
- High bond strength to a variety of substrates
- Heat and humidity resistance
- Good mechanical properties

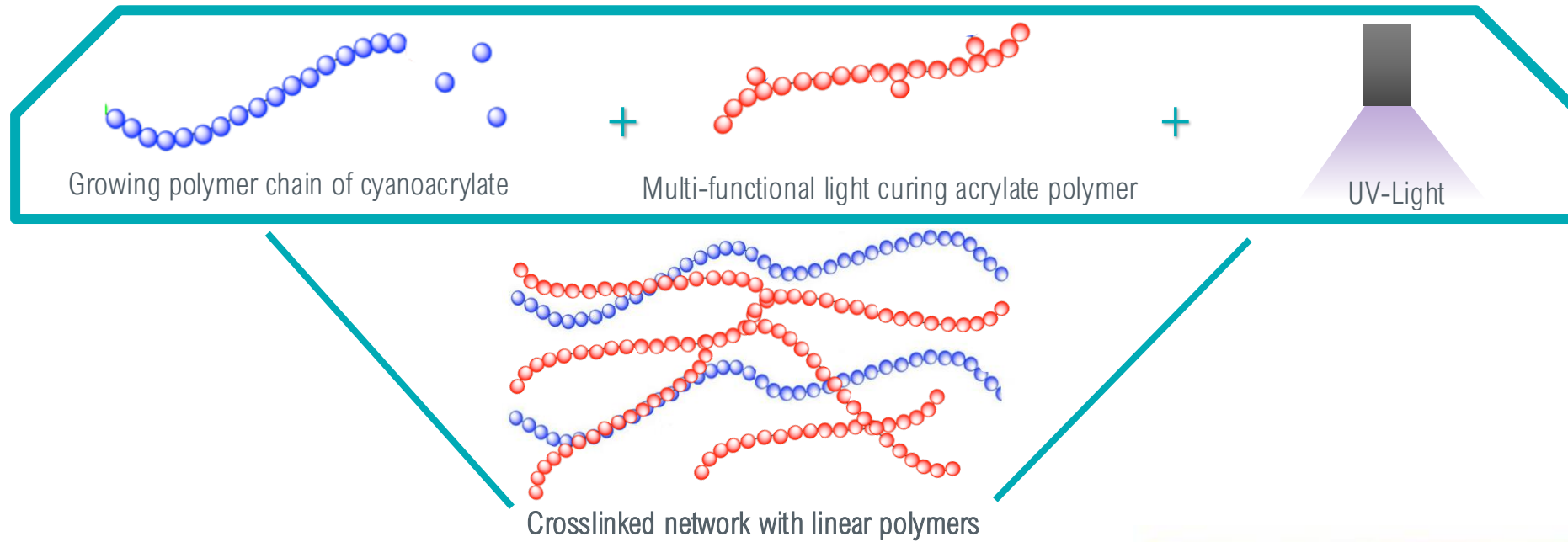


Dymax
HLC
adhesive

NEW Dymax Development

Hybrid Light Curing Technology – HLC adhesives

➡ Crosslinked network developed in-situ with the cyanoacrylate polymer chains



➡ Official Launch Date: June 2023

➡ stay tuned and



Equipment

- Dymax UVCS V3.0 Conveyor

Dymax UVCS Conveyor V3.0

Why was it developed?

- Current Dymax UVCS Conveyor V2.0 features and design are dated



Improvements needed to modernize usability of previous generation

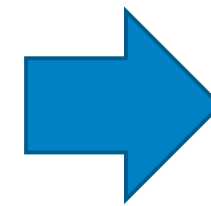
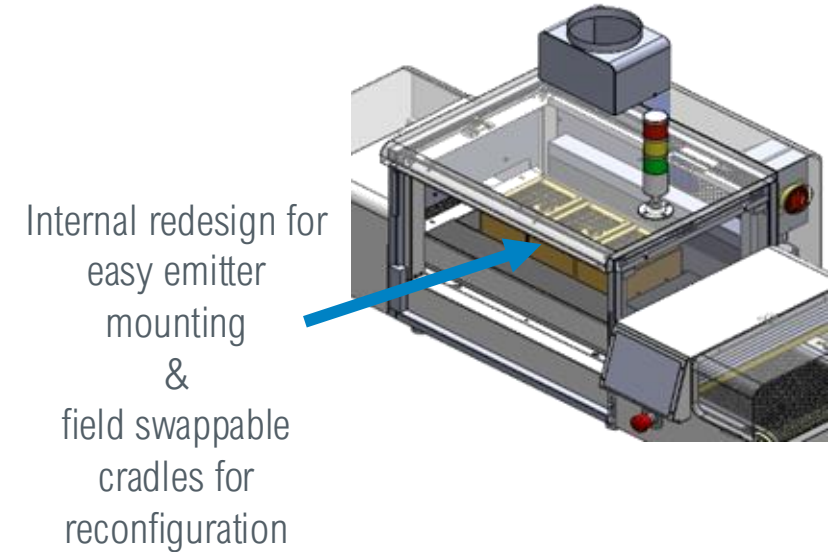
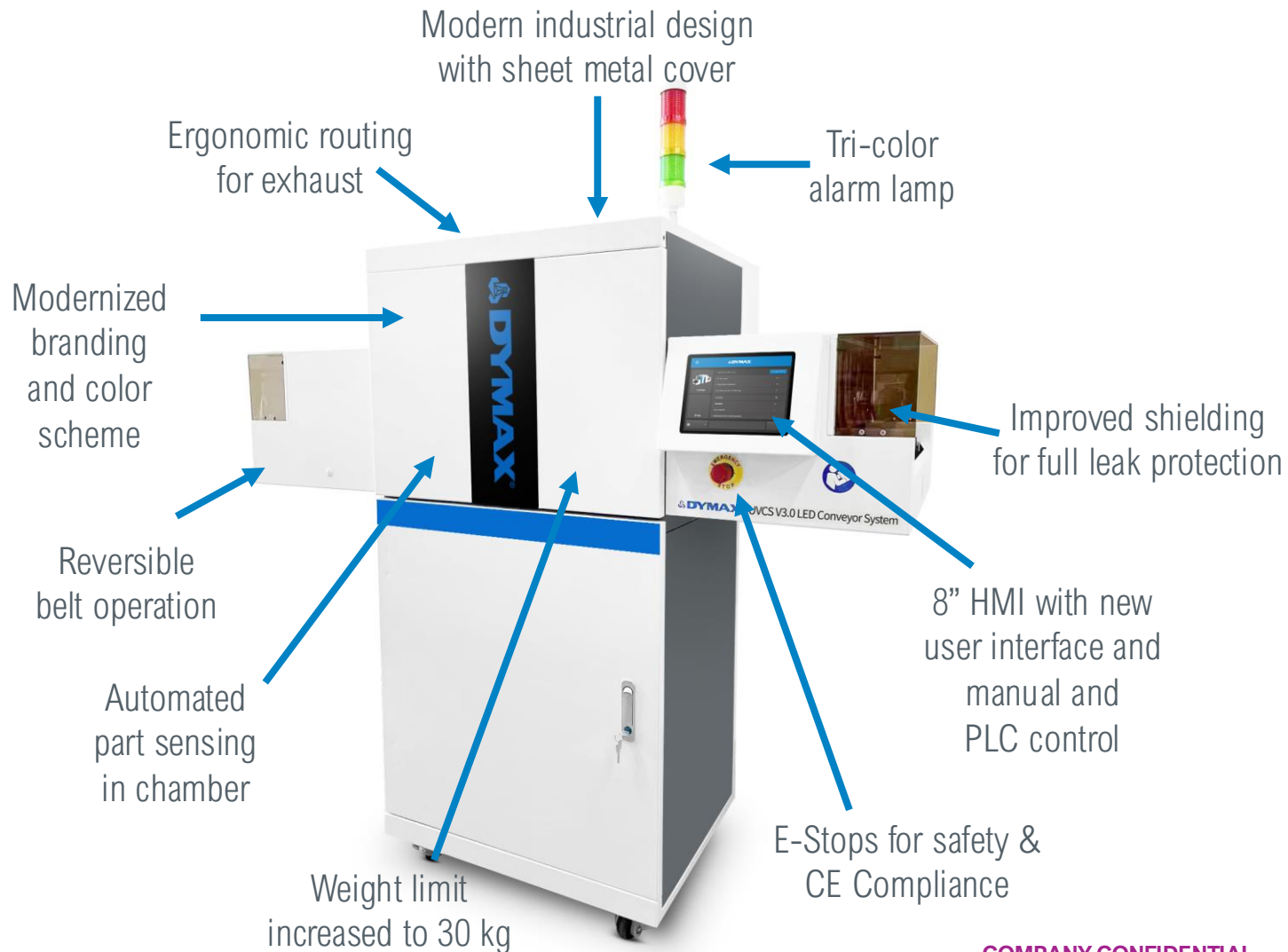
Major features and benefits:

- Modern 8" touch screen with improved user interface
- Reversible operation (belt and edge version available)
- Automated sensing for curable parts
- Improved mounting system for ease of emitter/lamp installation
- Full UV leak protection
- Enhanced cooling and exhaust design for keeping parts cool
- Local or remote PLC operation
- CE compliance for sale in Europe (single, global product)
- LED and Broadband version available (Fusion not included)



Dymax UVCS Conveyor V3.0

Technical Development (LED version)



LED version
has been launched first
Broadband version
to follow soon

Dymax UVCS Conveyor V3.0

Comparison: UVCS V3.0 vs V2.0

UVCS V3.0



User Interface:

- 8" Color touch screen
- Adjust time and intensity settings from HMI
- E-stops on each end & tri-color warning lamp

User Experience:

- Manual static, manual moving with time program and PLC modes
- Temperature and belt speed monitoring and feedback
- Enclosure reduces noise and heat exhaust
- Semi-universal cradle arrangements allow multiple lamp configurations

Operation:

- Belt speed 0.4-7.8m/min in 0.1 m/min increments
- Forward and reverse operation
- Automated on/off part sensing

Regulatory: CE & additional certifications for global compliance



UVCS V2.0



User Interface:

- Power push button and "Alarm clock" speed meter
- Separate operating control for blower

User Experience:

- Simple display, no diagnostics
- Manual or PLC
- Separate part number for each lamp configuration

Operation:

- Belt speed 0.4-9.7m/min in 0.1 m/min increments
- Single direction

Regulatory: No CE mark

Dymax UVCS Conveyor V3.0

Specifications

Property	Specification	
Model	Conveyor	Cabinet
		
Dimensions L x W x H	1420*640*820 mm ³	640*490*810mm ³
Weight	71 kg (Belt conveyor)	40 kg
Compatibility	FX 1250	
Belt Dimensions	300mm width / 150mm opening height	
Belt speed	0.4m/min ~ 7.8 m/min, in 0.1m/min increments	
Load Capacity	Left to Right: 30kg max. Right to Left: 25kg max	
Noise Level	75dBa (No Emitter inside, Fan speed 3000rpm)	
Operating temperature	+10°C to +40°C	
Storage temperature	-20°C ~ +50°C	
Operating Humidity	0-80% relative humidity, non-condensing	
Power	115V AC, 230V DC	
Environmental	IP 30	
Regulatory	CE, RoHS, Machinery Directive, UKCA, China GB4793.1-2007	

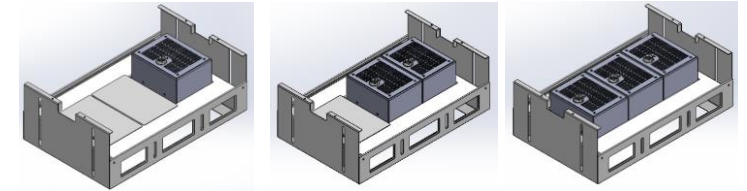
Dymax UVCS Conveyor V3.0

Selling Configurations

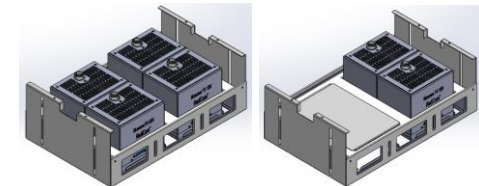


UVCS V3.0 LED Conveyor, Base	North America (110V)	Asia (220V)	Europe (220V)
Belt Version			
H Cradle Configuration	88880	88884	88888
V Cradle Configuration	88881	88885	88889
Edge Version			
H Cradle Configuration	-	-	-
V Cradle Configuration	-	-	-
Accessories			
Cabinet	80020		
Cradles	80021 Horizontal Configuration 80022 Vertical Configuration		

Horizontal Configuration **PN:80021**



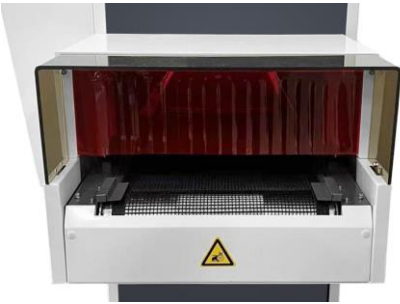
Vertical Configuration **PN:80022**



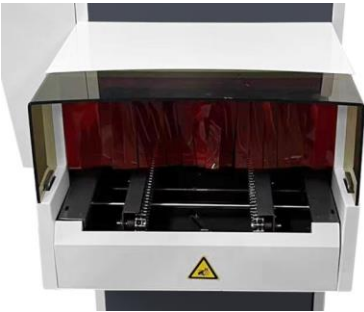
Dymax UVCS Conveyor V3.0

Selling Configurations

Belt Conveyor	NA Power Cord Asia Power Cord EU Power Cord	115V	Horizontal Cradle (1x1-1x3) Vertical Cradle (2x1 & 2x2)
		230V	
Edge Conveyor	NA Power Cord Asia Power Cord EU Power Cord	115V	Horizontal Cradle (1x1-1x3) Vertical Cradle (2x1 & 2x2)
		230V	
Arrangements	1x1, 1x2, 2x1, 2x2, 1x3		
Accessories	Cabinet, regional cords Interconnect cables, cradles		
Sellable Configurations	FX 1250 Emitters		



belt



edge



Conveyors will be purchased with lamps „a-la-cart“

Purchase:

- Conveyor configured for desired lamp arrangement
- Individual lamps & emitters
- Cabinet

Conveyor will ship with:

- Conveyor user manual
- Regional cord set

Customer will mount lamps & cabinet on site

Dymax UVCS Conveyor 3.0

Launch Information

Launch Timing	Q2 2023
Collateral	• Product Bulletin • Press Release • UVCS V3.0 Manual • CAD drawing
Service and Repair	Will be available at each region
UVCS 2.0 Phase-Out	Approximately 1 year from launch UVCS V2.0 Fusion will remain in portfolio



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