

DM HEALTHCARE PRODUCTS INC.

10080 Willow Creek Rd., San Diego, CA 92131

T: 858.348.1122 F: 858.348.1123

WWW.DMHPI.COM



Advanced Resins designed specifically for future innovations in Dental Health and Practice

DM Healthcare Products, Inc. (DMHPI) was created by the team of scientists at Designer Molecules, Inc. (DMI) in response to growing new opportunities in the healthcare field. Based on the extensive in-house developmental and formulation experience in high performance adhesives and having created several successful advanced bonding technology businesses, DMI was comfortable in identifying innovative ventures to create and improve resins that fulfill the need for better performing healthcare products. To date, DMI has over 65 US patents issued or pending.

DMHPI develops resins, oligomers, and other polymeric materials with unique properties including but not limited to low-shrinkage resins, non-phthalate plasticizers and non-Bisphenol A materials. Most of our products are functionalized with one or more reactive groups that permit their incorporation into organic polymer adhesives and coatings.

Since the DMI founding in 2001, our mission has been to develop unique organic molecules to solve difficult problems in a variety of markets. Over the last few years, we extended our innovations into the dental market.

We encourage you to stay ahead of the competition by partnering with DMHPI to develop new restorative composite resins and filling materials. Formulate with our sealants, adhesion promoters and plasticizers so your company can offer the newest resin innovations and advances in dental health.

We also offer some of the commonly used dental resins and adhesion promoters that are now out of patent, such as PMDM, PMGDM, 10-MDP, and 4-META.



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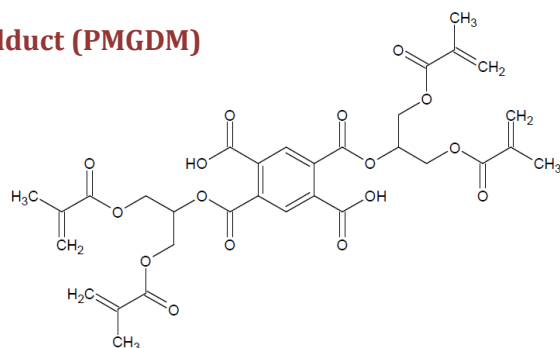
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ADHESION PROMOTERS

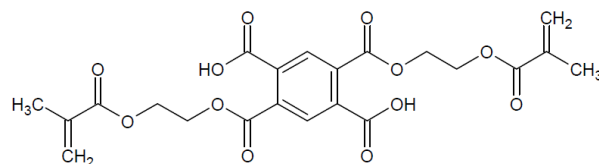
H1206: Pyromellitic Dianhydride Glycerol Dimethacrylate Adduct (PMGDM)

- Clear solution
- Improved shelf life
- Provided as 50% (wt/wt) solution in acetone



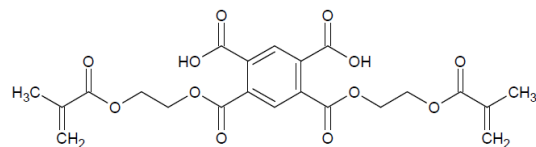
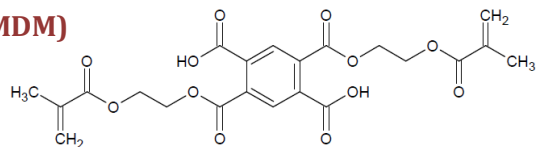
H1217: Pyromellitic Dimethacrylate (PMDM)

- Fine white powder
- Versatile additive for adhesion enhancement



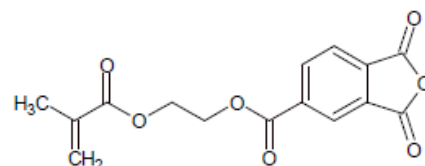
H1217-M: Pyromellitic Dimethacrylate Mixture of Isomers (PMDM)

- Fine white powder
- Lower cost alternative to H1217
- Versatile additive for adhesion enhancement



H1231: 4- Methacryloxyethyl Trimellitic Anhydride (4-META)

- Reactive Primer for Adhesion Enhancement
- White Powder
- Melting Point: 96 °C



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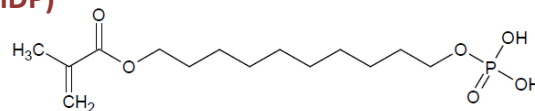
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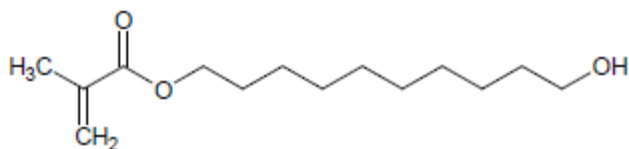
H1218: 10-Methacryloyldecyl Dihydrogen Phosphate (10-MDP)

- Phosphate containing methacrylate modified monomer
- Provides improved long-term bonding performance



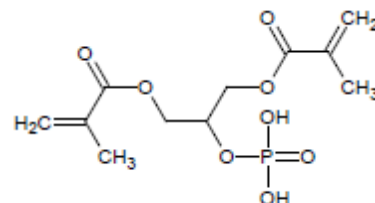
H1219: 1, 10-Decanediol / Mono-methacrylate

- Substrate for 10-MDP synthesis
- More hydrophobic than HEMA



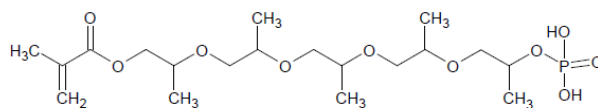
H1270: 1,3- Dimethacryloyl-3-Phosphonoxy Glycerol (GDMAP)

- Phosphate containing methacrylate modified monomer
- Provides improved long-term bonding performance



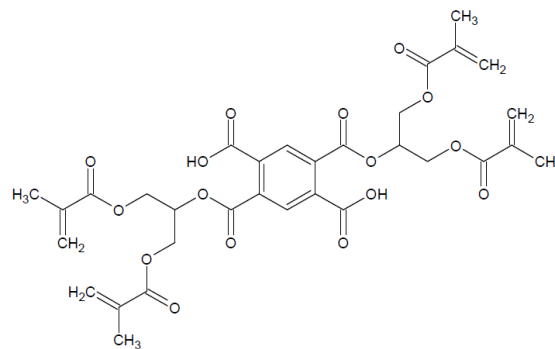
H1283: PPG (5) MA Phosphate

- Possible 10-MDP replacement
- Provides similar adhesion



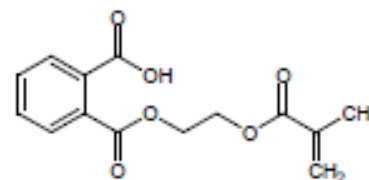
H1251: PMGDM Neat (solventless) version

- Lower cost non-flammable shipping
- Capable of custom dilution for adhesion system



H1306: 2-Hydroxyethyl Methacrylate-Phthalic Anhydride Adduct

- Liquid adhesive material
- Effective on biological surfaces
- Provides adhesion to nail plates



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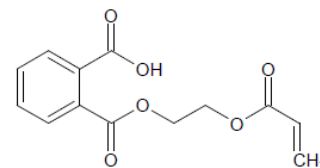
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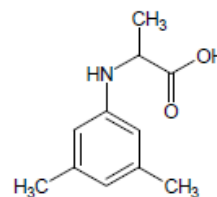
H1273: 2-Hydroxyethyl Acrylate-Phthalic Anhydride Adduct

- *Liquid adhesive material*
- *Effective on biological surfaces*



H1268: N-(3, 5-dimethylphenyl)alanine

- *Low color amine*
- *Radical cure with strong acids, such as PMDM*
- *Color stable, white solid*
- *Melting point - 122°C*



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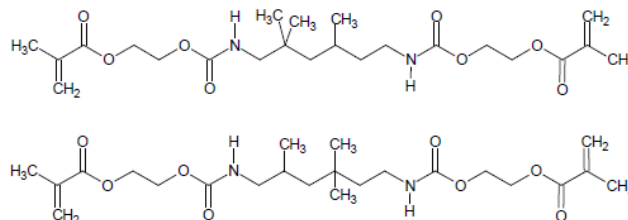
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BASE RESINS

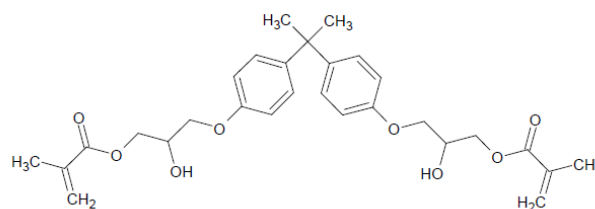
H1228: Urethane Dimethacrylate (UDMA)

- Light-cure capable
- Non-Bisphenol-A Resin
- Widely used in Dental Composites
- Refractive Index (20°C): 1.48



H1350: BisGMA

- Bowen Resin
- Most widely used composite formulation material
- Provides RI for high quality composite



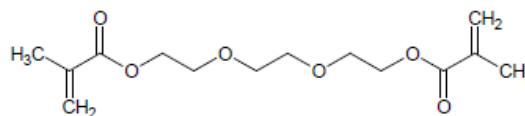
H1345: MDI Replacement for BisGMA

- Provides high RI material for high quality composites
- High viscosity for filler blending
- Similar reactivity to BisGMA

STRUCTURE AVAILABLE
ON
DMHPI WEBSITE

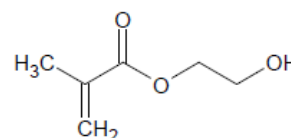
H1349: Triethyleneglycol Dimethacrylate

- Inhibitor BHT – 300-400 ppm
- Widely used diluent in dental composites



H1159: 2-Hydroxyethyl Methacrylate

- Low viscosity diluent
- Polar surface interactive



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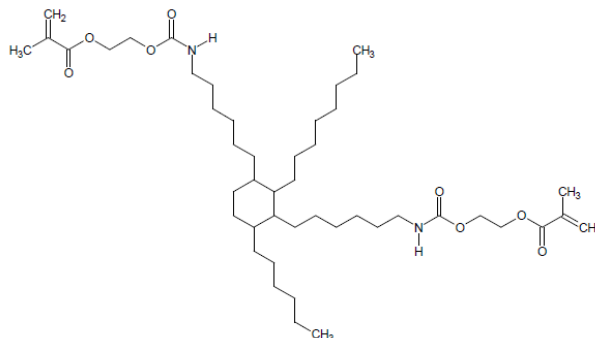
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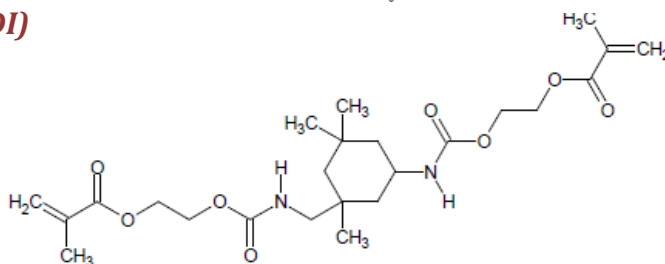
H1238: Dimer Acid Diurethane Dimethacrylate

- Low shrinkage on cure
- Very hydrophobic polymeric system



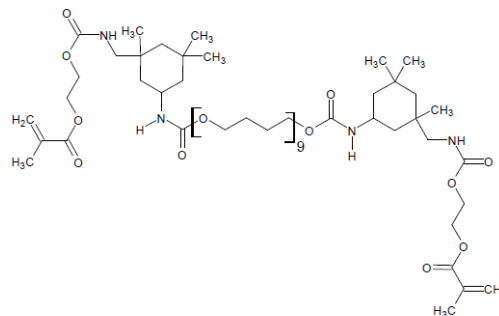
H1230: IPDI Urethane Dimethacrylate (UDMA-IPDI)

- Light-cure capable
- Non-Bisphenol A resin
- High viscosity



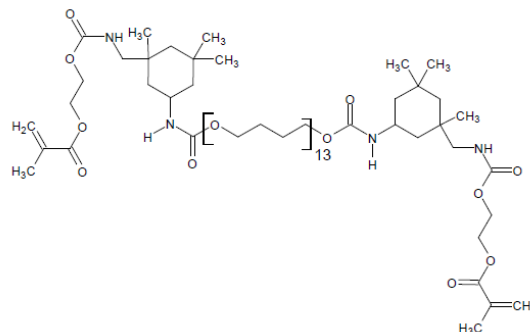
H1294: Soak-Off Methacrylate Nail Resin

- Nail gel resin base
- High viscosity
- Glossy cured surface
- Soaks off nail in acetone



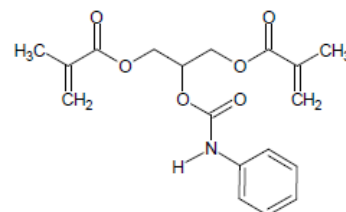
H1318: Soak-Off Methacrylate Nail Resin

- Nail gel resin base
- High viscosity
- Glossy cured surface
- Soaks off nail in acetone



H1262: Phenyl Glycerol Dimethacrylate (PGDMA) Urethane

- Low color
- Can be blended with GDMB H1223 to adjust viscosity
- Non-Bisphenol-A Resin



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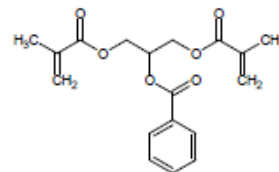
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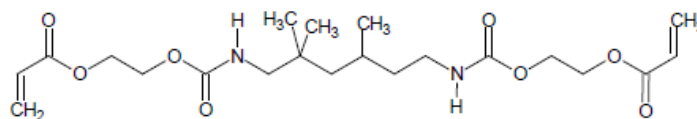
H1223: Glycerol Dimethacrylate Benzoate (GDMB)

- Low color
- Non-Bisphenol A resin resistance
- Very low viscosity
- Can be blended with PGDMA H1262 to adjust viscosity



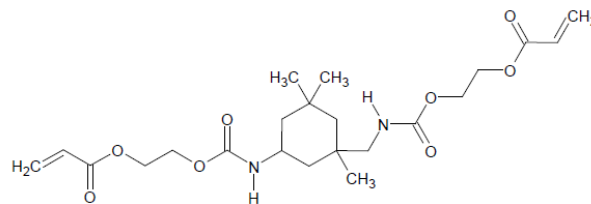
H1266: TMHDI Urethane Diacrylate

- Low color
- Nail gel component
- Rapid light activated cure



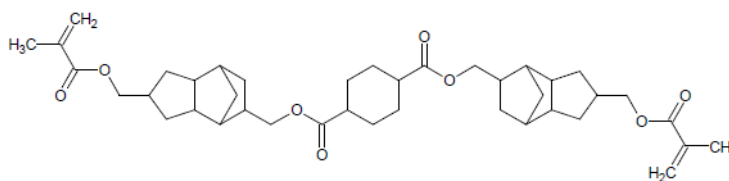
H1333: IPDI + 2-Hydroxyethyl Acrylate

- Base resin for nail gel formulations
- High viscosity
- Cures to hard glossy surface



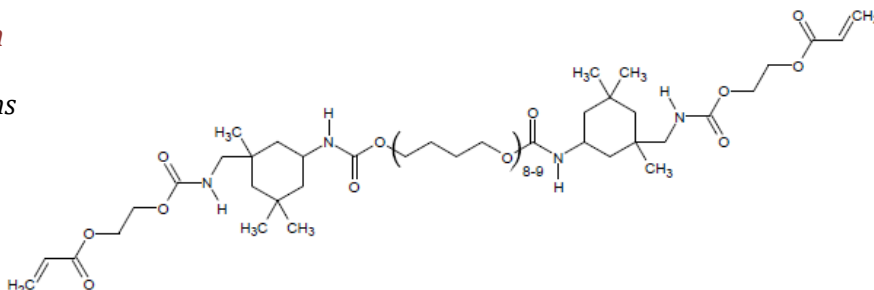
H1188: PEM 665

- BisGMA replacement
- High Refractive Index - 1.50
- Low shrinkage



H1293: Soak-Off Acrylate Nail Resin

- Base resin for nail gel formulations
- High viscosity
- Cures to hard glossy surface



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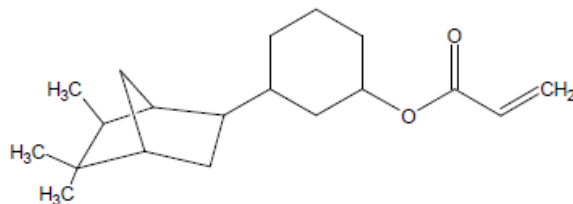
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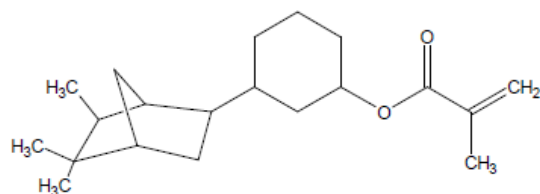
H1134: Isobornylcyclohexyl Acrylate

- *Reactive monomer for nail gel system*
- *Pleasant scent*



H1197: Isobornylcyclohexyl Methacrylate

- *Reactive monomer for nail gel system*
- *Pleasant scent*



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SILANATED DENTAL FILLER

H1280: 30% Barium Oxide Glass with a Refractive Index - 1.541

- *Trimethoxysilylpropyl methacrylate surface agent*
- *0.7-10.0 micron median particle sizes*
- *For BisGMA based systems*

H1282: 27% Barium Oxide Glass with a Refractive Index - 1.530

- *Trimethoxysilylpropyl methacrylate surface agent*
- *0.7-10.0 micron median particle sizes*
- *For UDMA based systems*

H1347: 33% Barium Oxide Glass with a Refractive Index - 1.55

- *Trimethoxysilylpropyl methacrylate surface agent*
- *0.7 - 10.0 micron median particle sizes*
- *For BisGMA based composite*

H1290: 27% Barium Oxide Glass with a Refractive Index - 1.53

- *Trimethoxysilylpropyl acrylate surface agent*
- *0.7 - 10.0 micron median particle sizes*
- *For Acrylate based systems*

H1291: Strontium Oxide Glass with a Refractive Index - 1.50

- *Trimethoxysilylpropyl methacrylate surface agent*
- *0.7 - 10.0 micron median particle sizes*
- *For Cosmetic nail systems*

H1344: Silanated Reactive Dental Filler Glass

- *0.7 - 10.0 micron median particle sizes*
- *Application Glass Ionomer Cements*
- *Fluoride Releasing Glass*

H1289: Silanated Reactive Dental Filler Glass with a Refractive Index - 1.50

- *Trimethoxysilylpropyl acrylate surface agent*
- *0.7 - 10.0 micron median particle sizes*
- *For Acrylate based systems*

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UNSILANATED DENTAL FILLER

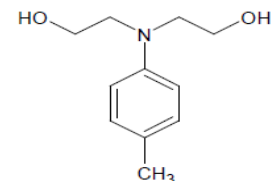
A6255: UnSilanated Glass Dental filler Glass

- 2 micron median particle size
- Glass Refractive Index 1.53

CURING PROMOTER

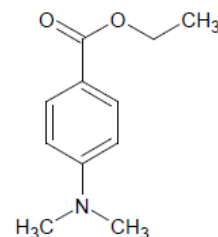
H1332: Distilled DHEPT

- Improves cure over DMPT
- Low color



A6246: Ethyl 4-(Dimethylamino)benzoate

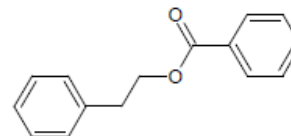
- Works very well with photoinitiators
- Color stable



PLASTICIZER

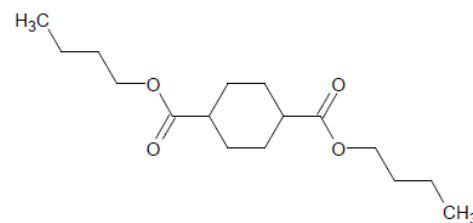
H1222: Phenethyl Benzoate

- Non-phthalate
- High index of refraction
- Very low viscosity



H6220: Dibutyl-1,4-Cyclohexanedicarboxylate

- Non-phthalate
- Very low viscosity



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Questions or Information Please Contact:

Allen Johnston, Ph.D.

President

(858) 348-1122 x 4787

[*ajohnston@dmhpi.com*](mailto:ajohnston@dmhpi.com)