

# **A COMPREHENSIVE STUDY OF DENTAL MATERIALS AND THEIR TOXIC INGREDIENTS ASSOCIATED WITH NEURO-CUTANEOUS SYNDROME (NCS) AND MORGELLONS, WITH NOTES ON RESEARCH BACKGROUND**

© 2012 By Omar M. Amin, BSc, MSc, PhD, USA

## **Abstract**

*Neurocutaneous Syndrome (NCS) and Morgellons were recently described from many patients showing dermatological and neurological disorders. Of the many different possible exposures, the most common were dental materials, especially sealants, liners, bases, cements, adhesives, bonding agents, metals, crowns, and root canal materials. The role of these dental materials as the causative agents of NCS was verified by the application of the cause-effect relationship. The original listing included about 360 products that were originally reported in a previous publication by the same author (Amin, 2005). The present work includes a considerably more extensive listing of 644 products. It is recommended that dentists research MSDS sheets for proposed dental materials to be used, and match blood bio-compatibility test results with patients' dental history before embarking on, at least major, dental procedures.*

## **Introduction on research background**

The terms **Morgellons**, and **Neuro-cutaneous Syndrome (NCS)** as characterized by Amin (2001-2010) are used interchangeably, yet cautiously, as their symptoms are very similar. While “Morgellons” has never been researched, its etiological agent(s) and remedies have never been identified, these factors for NCS have been well researched and published in refereed medical journals (see below) and patients have been successfully treated. Only a few highly speculative accounts of a wide assortment of purported infectious agents for Morgellons have been published in non-refereed obscure publications, and no “Morgellons” patients have ever been helped.

At the **Parasitology Center, Inc. (PCI)**, we have been researching NCS since 1996. Our early reports on this syndrome included the description of a case with many facial opportunistic infections from Oklahoma (Amin, 1996) and the first naming and diagnosis of NCS from 3 more cases, with a special reference to fibers and springtails (Collembola) (Amin, 2001). By 2003, we were able to provide a comprehensive diagnosis of NCS and establish the link to dental toxins as the causative agents.

Amin (2003) clarified the nature of action of dental liners (bases) in the causation of NCS neurological and dermatological symptoms and provided the history of 3 NCS patients who have recovered following treatment thus establishing a cause-effect relationship. Various versions of this landmark publication were subsequently published elsewhere (Amin 2004 a, b, 2006 a).

The above contributions were researched and published, and patients were successfully treated long before we discovered a similar clinical entity called Morgellons. The only difference is that we, at PCI, have done the research, established a causal relationship with dental toxins, as well as with other less frequent toxic exposures, developed a protocol, and successfully treated patients. All patients that have followed our protocol have invariably recovered.

Most people have had dental work. Many have various degrees of sensitivity to some dental materials to which their bodies manifest varied intensities of symptoms. This epidemic-in-disguise has been routinely misdiagnosed by medical professionals who often label patients as delusional because of their unfortunate description of their neurological symptoms (actually caused by nerve damage) as having been caused by parasite infections. Amin (2004 c) specifically addressed this issue while discussing the clinical history of 24 NCS patients. Of these patients, 7 who have followed our protocol and completed treatment, by the time of publication, have experienced full recovery.

Amin (2005) provided an annotated list of about 360 dental materials that have been involved in the causation of NCS symptoms in patients that we have seen. Toxic ingredients common to all listed chemicals were classed in 4 categories. These categories are found in many more dental chemicals that were not reported in Amin's (2005) list but existed in our data base; the subject matter of this publication. An overview of NCS (Amin, 2006 b) made special reference to organ system symptomatology in 50 patients of both sexes and all age groups, misdiagnoses, storage organs, liners, drug involvement, incubation period, and recovery, with a detailed discussion of 5 relevant cases. Amin (2007) further analyzed 18 new NCS cases that have been in various stages of treatment and recovery and have demonstrated that those patients that have followed and completed our protocol have invariably recovered. Among patients experiencing recovery, 15 have shared their experience and perspectives (Amin, 2009). NCS symptoms stated by 166 patients upon first examination at PCI were reported by Amin (2010). These patients expressed how they felt then and the reasons for which they came to see us in the first place.

## **Materials and methods**

The active toxic ingredients established as the causal factors for NCS observed in many of our patients were researched using actual patient histories, interviews, symptomatology, and MSDS sheets of dental materials used. Additional dental products including the same toxic ingredients were also similarly studied and reported herein.

## **Results and Discussion**

The components in catalysts and bases of Dycal, Life and Sealapex were identified in Amin (2004 a, b) who provided an analysis of the nature of action of the included toxic ingredients causing the

observed dermatological and neurological symptoms in NCS patients. Reference was also made to Fynal, IRM, Sultan U/P, Gluma One Bond and Scotch Bond by Amin (2004 a). These dental products and over 350 others reported by Amin (2005) and additional products included herein are now recognized as toxic. Toxicity and individual reactivity will vary from person to person depending on degree of sensitivity to the compounds which is related to the concentration of the toxic ingredient(s) in the product, amount of product used and the number of teeth involved.

The toxic ingredients common to all 644 dental products reported herein belong in four major categories: Zinc Oxide, Ethyltoluene Sulfonamide (especially in patients with allergy to sulfa and toluene), Titanium Dioxide and other metal compounds (especially in implant patients and others with allergy to metals) and Methacrylate compounds, as well as Calcium Hydroxide. Our studies of the many NCS patients examined indicate that these ingredients are causally associated with their symptoms. When the source (cause) is removed by appropriate dental rehabilitation and detoxification, and other cleansing processes are properly implemented, the patient recovers (effect). It should be noted that while the reported list is far more comprehensive than the one reported earlier by Amin (2005), it may not include all what is there in the market which continually change and increase. I have concluded, however, that the listing of more dental compounds will not make the point any stronger at this time. Dentists should always attempt to identify the toxic elements in the dental products that they use whether they are included in this list or not by examining the relevant OSHA-required MSDS forms especially when they embark on major dental procedures, and should insure their biocompatibility to patients' biological as well as energy systems.

**Please note that toxicity and individual reactivity will vary from person to person and that there is no one product that is "safe" for everyone. What is safe for one person may be toxic for another.**

The following is a listing of all 644 dental products studied and their toxic ingredients. The name of the product is bolded and precedes the name of its ingredients:

**A-paste, clearfil DC cement:** hydrophobic dimethacrylate, bisphenol a diglycidyl-methacrylate, triethyleneglycol dimethacrylate  
**Abscess remedy powder + dexamethasone:** zinc oxide  
**Absolute Dentin (All Shades):** uncured methacrylate ester monomers  
**Access crown:** urethane dimethacrylate  
**Accu Bond Sealant A:** methacrylates  
**Accu Bond Sealant B:** bisphenol diglycidyl-methacrylate  
**Acrylic Primer:** methyl methacrylate  
**Acrylic Teeth:** polymethyl-methacrylate  
**Activator, clearfil porcelanin bond:** bisphenol a polyethoxy dimethacrylate, 3-methacryloyloxypropyl trimethoxy  
**Acrylic Bonding Agent-Nobilium:** methyl methacrylate  
**Acrylic liquid monomer:** methyl methacrylate  
**Acrylic Liquid-Oratone Heat:** methyl methacrylate  
**Acrylic Liquid-Verno Bond VB:** methyl methacrylate  
**Acrylic Standardized Crown Post:** zinc oxide

**Add&Bond:** uncured methacrylate  
**Adhesive Bond II:** methacrylates, maleic-acid-mono-2-methacryloyl-oxyethyl ester  
**Adper:** dimethacrylates  
**Adper prompt self-etch adhesives:** methacrylated phosphoric esters, 20hydroxyethyl methacrylate (hema)  
**Aelite Aesthetic enamel:** ethoxylated bisphenol a Diglycidylmethacrylate  
**Aelite Liner Base:** bisphenol a diglycidyl-methacrylate, ethoxylated bisphenol a dimethacrylate  
**Aelite Liner Catalyst:** bisphenol a diglycidylmethacrylate, triethyleneglycol, triethyleneglycol dimethacrylate  
**Aelite Purpose Body:** ethoxylated bisphenol a dimethacrylate, triethyleneglycol dimethacrylate  
**Aelite Posterior:** ethoxylated bisphenol a dimethacrylate  
**Aelite Packable Dentin:** ethoxylated bisphenol a dimethacrylate  
**Aeliteflo / Aeliteflo LV:** ethoxylated bisphenol a dimethacrylate, triethyleneglycol dimethacrylate

**AH 26 Power:** titanium dioxide  
**Alginate Impression Materials:** potassium titanium fluoride  
**All-Bond 2:** dimethacrylates  
**All-Bond 2 Primer A:** na-n-tolyglycine glycidylmethacrylate  
**All Bond 2 Primer B:** biphenyl dimethacrylate  
**Alloy primer:** 10- methacryloyloxydecyl dihydrogen phosphate  
**Amalgam Bonding Base and Catalyst:** ethoxylatedbisphenol a dimethacrylate, triethyleneglycol dimethacrylate  
**Amalgambond HPA Powder:** poly methyl methacrylate  
**Anchor:** Mixture of methacrylate resins, including bisgma  
**A-Paste, Panavia F:** hydrophobic aromatic dimethacrylate, hydrophobic aliphatic dimethacrylate, hydrophilic dimethacrylate  
**Aquasil monophase:** titanium dioxide  
**Aquasil Rigid:** titanium dioxide  
**Aquasil XLV:** titanium dioxide  
**Aquasil Putty:** titanium dioxide  
**Aquasil LV:** titanium dioxide

- Aquasil Deca Monophase:** titanium dioxide  
**Aquasil Deca Heavy:** titanium dioxide  
**Aquasil Ultra:** titanium, dioxide, silicon dioxide, hydrophobic amorphous fumed silica  
**A.R.T. BOND:** methacrylates  
**A.R.T. BOND Primer B:** methacrylates  
**ArtGlass:** methacrylates  
**ArtGlass connector:** methyl methacrylate  
**ArtGlass Creative Colorfluids:** methacrylates  
**ArtGlass Liquid:** trimethylolpropanethoxytriacyrylate  
**ArtGlass Opaque:** trimethylolpropanethoxytriacyrylate  
**ArtGlass Creative Transpafluid TF1:** methacrylates  
**ArtGlass Creative Transpafluid TF2:** methacrylates  
**A.S.A.P. primer/bond:** 2 hydroxyethyl methacrylate  
**Attachment bond base:** methacrylates  
**Attachment bond cat:** methacrylates  
**Aurora Visible Light Curing Custom Tray Resin Liquid:** methyl methacrylate  
**Axcel Composite Restoration System:** uncured methacrylate ester monomers  
**Axcent Heat Cure Liquid Monomer:** methyl methacrylate, alkyl Dimethacrylate  
**Axcent High Clarity SC Liquid Monomer:** methyl methacrylate, alkyl dimethacrylate  
**Axcent Self Cure Liquid Monomer:** methyl methacrylate  
**Axcent Orthodontic Powder:** titanium dioxide  
**Axcent Premium Acrylic Powder:** dialkyl phthalate, titanium dioxide  
**Axcent Standard Acrylic Powder:** titanium dioxide  
**Axcent 15 Minute Liquid Monomer:** methyl methacrylate, alkyl dimethacrylate  
**B-paste, clearfil DC cement:** hydrophobic dimethacrylate, bisphenol a diglycidylmethacrylate, triethyleneglycol dimethacrylate, hydrophilic dimethacrylate  
**Band-Rite:** methacrylate resins  
**Barricaid:** urethane dimethacrylate resin  
**Belleglass HP Metal Primer:** methyl methacrylate monomer  
**Belleglass NG (Paste Products):** methacrylates  
**Bis- Core Dual Cure Catalyst:** bisphenol a diglycidyl methacrylate, triethyleneglycol dimethacrylate  
**Bisfil core:** methacrylates  
**Bisfil II base paste:** dimethacrylates, methacrylates  
**Bisfil 2B:** dimethacrylates, methacrylates  
**Bis-GMA Composite:** bisphenol a-glycidyl methacrylate resin  
**BlockOut Resin, Space Maintainer:** aromatic and aliphatic dimethacrylate  
**Blocset Liquid:** methacrylates  
**Blocset paste:** methacrylates  
**Bond I:** dimethacrylates  
**Bond liquid, clearfil protect bond:** bisphenol a diglycidylmethacrylate, 20 hydroxyethyl methacrylate, hydrophobic dimethacrylate, n,n-diethanol-p-toluidine  
**Bond liquid A, clearfil liner bond 2v:** bisphenol a diglycidylmethacrylate, 2- hydroxyethyl methacrylate, hydrophobic dimethacrylate, n,n- diethanol-p-toluidine  
**Bond liquid B, clearfil liner bond2v:** bisphenol a diglycidylmethacrylate, 2- hydroxyethyl methacrylate, hydrophobic dimethacrylate  
**Bright Light Chemical Cure Composite (Base):** methacrylates  
**Bright Light Light Cure Microhybrid Composite:** methacrylates  
**Brilliant Core (base):** methacrylates  
**Brilliant Core (catalyst):** methacrylates  
**Brilliant Dentin, Brilliant Enamel, Brilliant Incisal:** methacrylates  
**Brilliant M.H. Margin Bond (base):** methacrylates  
**Brilliant M.H. Margin Bond (catalyst):** methacrylates  
**Brilliant M.H. (catalyst), Brilliant M.H. (catalyst) Slow:** methacrylates  
**Brown Aluminum Oxide:** aluminum oxide, titanium dioxide  
**Bur Block:** zinc  
**Brush & Bond:** methyl methacrylate, 2-hydroxyethyl methacrylate (hema)  
**Brux-eze Liquid:** ethyl methacrylate  
**Calciobiotic Root canal Sealer Powder Portion:** zinc oxide  
**Calcigel:** calcium hydroxide  
**Calplus:** calcium hydroxide  
**Calcium Hydroxide Powder:** calcium hydroxide  
**Calibra:** polymerizable dimethacrylate resin, titanium dioxide  
**Calibra:** titanium dioxide  
**Calibra:** bis-gma, polymerizable dimethacrylate resins  
**Calciject:** calcium hydroxide  
**Calcium Hydroxide Points:** gutta percha, calcium hydroxide  
**Catalyst liquid, clearfil new bond:** bisphenol a diglycidylmethacrylate, 10- methacryloyloxydecyl dihydrogen phosphate, 2-hydroxyethyl methacrylate, hydrophobic dimethacrylate  
**Catalyst liquid, clearfil photo bond:** bisphenol a diglycidylmethacrylate, 10- methacryloyloxydecyl dihydrogen, 2-hydroxyethyl methacrylate, hydrophobic dimethacrylate  
**Catalyst paste, clearfil core new bond:** triethyleneglycol dimethacrylate, bisphenol a diglycidylmethacrylate  
**Catalyst paste, panavia 21:** bisphenol a polyethoxy dimethacrylate, 10-methacryloyloxydecyl dihydrogen phosphate, hydrophobic dimethacrylate  
**Caulkcrete 100:** titanium dioxide  
**Cavalite:** hydroxyethylmethacrylate, dimethacrylates  
**Cavitec Base:** zinc oxide  
**Cavit:** zinc oxide  
**Cavitemp:** methacrylate, zinc oxide  
**Cavity liner (PCL):** calcium hydroxide  
**C & B Cement Catalyst:** bisphenol a diglycidylmethacrylate, triethyleneglycoldimethacrylate  
**C & B Cement Base, Opaque, Natural and Natural with fluoride:** bisphenol a diglycidylmethacrylate, ethoxylated bisphenol a dimethacrylate  
**Ceka Bond:** dimethacrylate  
**Ceka Site:** titanium dioxide, urethane dimethacrylate  
**Cerman X:** methacrylate  
**Charisma/Charisma:** methacrylates  
**Charisma Creative Colorfluids:** methacrylates  
**Ceram X Nano Ceramic Restorative:** polymerizable dimethacrylate resin  
**Citricon Base Paste:** zinc oxide  
**Choice Dual-Cure Liquid Catalyst:** bisphenol diglycidylmethacrylate  
**Chromackone Alginate Impression Materials:** potassium titanium fluoride  
**Citricon Base Paste:** Zinc Oxide  
**Choice Aesthetic Resin Cement Base and Paste catalyst:** bisphenol diglycidylmethacrylate  
**Clearfil AP-X PLT:** bisphenol a diglycidylmethacrylate, triethyleneglycol dimethacrylate  
**Clearfil Ceramic Primer:** 3-trimethoxysilylpropyl methacrylate  
**Clearfil DC Bond Liquid A:** 2-hydroxyethyl methacrylate  
**Clearfil S<sup>3</sup>:** 2-hydroxyethyl methacrylate, bisphenol a diglycidylmethacrylate, 10-methacryloyloxydecyl  
**Clearfil SE Bond:** 2-hydroxyethyl methacrylate, dimethacrylates, 10-methacryloyloxydecyl  
**Clearfil SE Primer:** 2-hydroxyethyl methacrylate, dimethacrylates  
**Clearfil st opaquer:** bisphenol a diglycidylmethacrylate, triethyleneglycol dimethacrylate  
**Clearfil-S-Bond:** 2-hydroxyethyl methacrylate, bisphenol a diglycidylmethacrylate, 10-methacryloyloxydecyl  
**Cohen Luks Root Canal Powder:** zinc oxide  
**Coltosol F:** zinc oxide  
**Cool Bond:** methacrylates  
**Cool Natural:** methacrylates  
**Cool Temp:** methacrylates  
**Composite, clearfil photo core:** bisphenol a diglycidylmethacrylate, triethyleneglycol dimethacrylate  
**Comspan & Comspan Opaque:** polymerizable dimethacrylate resin, titanium dioxide  
**Contax Bond / Primer:** aromatic dimethacrylate, polyol-mono-, dimethacrylate, polycarboxylic polymethacrylate  
**Contemporary Colored Ortho-Jet Liquid:** methyl methacrylate, n,n-dimethyl-p-toluidine

- Contemporary Colored Ortho-Jet Powder:** plasticized methacrylate polymer
- Contour, Precapsulated Dental Amalgam:** mercury, alloy powder contains silver, tin and copper metals
- Core C-1:** titanium dioxide
- Core-Flo Base/ Catalyst:** ethoxlated bisphenol a dimethacrylate, triethyleneglycol dimethacrylate, bisphenol a diglycidyl methacrylate
- Core Material:** urethane dimethacrylate, aliphatic dimethacrylate, aromatic dimethacrylate
- Corestore 2 Paste Products ( restorative composite):** uncured methacrylate ester monomers
- CR Hybrid:** blend of multifunctional methacrylates
- CRCS:** calcium hydroxide, zinc oxide
- Delton Opaque Catalyst 2694, Part-A:** aromatic and aliphatic dimethacrylate monomers
- Delton Opaque Universal 2694, Part-B:** aromatic and aliphatic dimethacrylate monomers
- D/E Resin:** bisphenol diglycidylmethacrylate, urethane dimethacrylate, hydroxyethyl methacrylate
- Dentacolor:** dodecandiol dimethacrylate
- Dentacolor Creative Colorfluids:** methacrylates
- Dentacolor Connector:** methyl methacrylate
- Dentacolor Modeling Liquid:** methacrylates
- Dentacolor Opaquer Liquid:** methyl methacrylate
- Dentacolor Creative Transpafluid T1:** methacrylates
- Dentacolor Creative transpafluid T2:** methacrylates
- Dental Cement Ready Mix Same As Cavit-G Coltosol 40mg:** zinc oxide, zinc sulphate
- Dentalis KEZ:** zinc oxide and calcium hydroxide
- Dentalon plus liquid:** n-butyl methacrylate, ethyl methacrylate
- Dentalon plus powder:** benzyl-5-phenylbarbituric ure
- Denthesive II B:** hydroxyethyl methacrylate
- Dentex liquid:** methyl methacrylate monomer stabilized
- Dentex Powder:** poly methyl methacrylate
- Dental Composite:** glass filler materials in aromatic/aliphatic methacrylate resins
- Dental Dam:** aromatic and aliphatic dimethacrylate
- Dentin Adhesive, Light Cure:** aliphatic dimethacrylate, aromatic dimethacrylate, polycarboxylic polymethacrylate
- Dentweld liquid:** methyl methacrylate monomer stabilized
- Dentweld Powder:** poly methyl methacrylate
- Dentpro:** zinc oxide-eugenol cement
- Desenzal:** hydroxyethyl methacrylate n/e n/e
- DeTrey:** silver, titanium dioxide, bismuth oxide, methanamine
- D.M.M., Die Stone:** calcium sulfate, hemihydrate (gypsum), calcium oxide
- DMP Bonding Base:** methacrylates
- DMP Bonding Catalyst:** methacrylates
- DMP Single Bond (Light Cure):** methacrylates
- Doc's best root canal sealer with copper:** zinc oxide
- DT Temporary Dressing:** calcium hydroxide
- Dual Cure Resin Cement:** dimethacrylates
- DUO-Link Base/Catalyst:** bisphenol a diglycidyl methacrylate, triethyleneglycol dimethacrylate, urethane dimethacrylate
- DuraBase Liquid:** methyl methacrylate
- Dura conditioner powder:** poly ethyl methacrylate
- Dura base soft powder:** poly ethyl methacrylate
- Dura base soft liquid:** methyl methacrylate monomer stabilized
- DuraFill:** methacrylates
- Durahue Liquid:** methyl methacrylate
- Durahue Powder:** titanium dioxide, plasticized methacrylate polymer
- DuraKore Liquid:** methyl methacrylate
- DuraKore Powder:** titanium dioxide, poly ethyl methacrylate
- Duralay Liquid:** methyl methacrylate
- Duralay II Liquid:** methyl methacrylate
- Duralay II Powder:** blend of acrylic copolymer and methacrylate polymer
- Duralay-Powder-Blue:** methacrylate polymer
- Duralay-Powder-Clear:** methacrylate polymer
- Duralay-Powder-Red:** methacrylate polymer
- Duralay Temporary Crown & Bridge Powder-Shades:** titanium dioxide, plasticized methacrylate polymer
- DuraLiner II Liquid:** methyl methacrylate
- Duratray Liquid:** methyl methacrylate
- Dura-Ortho Liquid:** methyl methacrylate
- Dura-Ortho Powder:** poly methyl methacrylate
- Dura Rely-A-Soft Powder:** titanium dioxide, poly ethyl methacrylate
- DuraSeal Liquid:** methyl methacrylate
- DuraSeal powder:** titanium Dioxide, poly ethyl methacrylate
- DuraTray Powder:** poly methyl methacrylate
- Duratray II Powder:** lend of acrylic copolymer and methacrylate polymer
- Durelon:** zinc oxide
- Dycal:** calcium hydroxide, ethyltoluene sulfonamides, zinc oxide, titanium dioxide, barium sulphate
- Dyract:** urethane dimethacrylate resin, polymerizable trimethacrylate resin
- DyractCem Plus Liquid:** methacrylate
- Dyract Extra:** methacrylate
- Dyract Flow:** methacrylates
- Dyract Seal:** methacrylates
- Ed Primer II-liquid A, panavia F 2.0:** 2-hydroxyethyl methacrylate, 10-methacryloyloxydecyl dihydrogen phosphate, n-methacryloyl 5-aminosalicylic acid, n,n-diethanol p-toluidine
- Ed Primer II-liquid B, panavia 2.0:** n-methacryloyl 5-aminosalicylic, n,n-diethanol p-toluidine
- Ed Primer-liquid A, panavia 21:** 2-hydroxyethyl methacrylate, 10-methacryloyloxydecyl dihydrogen phosphate, n-methacryloyl 5-aminosalicylic acid, n,n-diethanol p-toluidine
- Ed Primer liquid B, panavia 21:** n-methacryloyl 5-aminosalicylic acid, n,n-diethanol p-toluidine
- Elan ( Restorative Composite):** uncured methacrylate ester monomers
- Electric Ortho-Jet Powder:** methacrylate copolymer
- Embrace WetBond Class V (EMV,EMVA2,EMVA35,EMVB2,EMVD2):** acrylate resins
- Embrace WetBond First Coat (EMFC):** acrylate resins
- Embrace WetBond Opaquer (EMOP):** acrylate resins
- Embrace WetBond Pit and Fissure Sealant (EMS,EMS3,EMSW,EMSW3):** acrylate resins
- Embrace WetBond Seal-n-Shine (EMSNS,EMSNY):** acrylate resins
- Embrace WetBond Universal resin cement (EMCA,EMCAR,EMCS,EMCSR):** acrylate resins
- Enamel bonding agent:** aliphatic dimethacrylate, aromatic dimethacrylate, aromatic amine
- Encore AF:** bisphenol diglycidyl methacrylate, triethylene glycol dimethacrylate
- Encore Bond:** diurethane dimethacrylate, hydroxyethyl methacrylate
- EndoFill Slow Setting (powder):** zinc oxide
- Epic-AP:** methacrylate monomers (bifunctional)
- Epic-TMPT Composite:** di-2-methacryloxyethyl
- Epiphany:** UDMA, pegdma, ebadma, bisgma. Not to be used by those allergic to methacrylates
- 3M ESPE Clinpro:** bisphenol A diglycidyl, triethylene glycol dimethacrylate, titanium dioxide
- Estic Bond Base:** methacrylates, (4-methylphenyl) imino bisethanol
- Estic Bond Cat:** methacrylate
- Estic Microfill Base:** methacrylates
- Estic Microfill Cat:** methacrylates
- Esthet. X Flow:** titanium dioxide, urethane modified bis-gma dimethacrylate, polymerizable dimethacrylate resin
- Esthet. X Improved Micro matrix Restorative:** titanium dioxide, urethane modified bis-gma dimethacrylate
- Estiseal LC:** methacrylates
- Etch-Free Components A&B:** methyl methacrylate
- Fi-cem Paste Alecks Zinc (Mizzy):** zinc oxide
- Fill In Base Paste Products ( Temporary Crown and Bridge Material):** uncured methacrylate ester, methyl methacrylate monomers
- Fill In Catakyst Paste ( Temporary Crown and Bridge Material):** uncured methacrylate ester monomers



- Filtek:** dimethacrylates  
**Filtek Z100:** methacrylates  
**Filtek Z250:** dimethacrylates  
**Flexacryl Hard Liquid:** n-butyl methacrylate, dimethyl-p-toluidine  
**Flexacryl Soft Liquid:** n-butyl methacrylate, dimethyl-p-toluidine  
**Flexacryl Powder:** plasticized methacrylate polymer  
**Flows-Rite:** methacrylate resins  
**Fluorcore:** urethane dimethacrylate resin, aluminum oxide  
**Fluorocor 2:** aluminum oxide, bis-gma resin, polymerizable dimethacrylate resin  
**Fluroshield:** titanium dioxide, polymerizable dimethacrylate resin, urethane modified bis-gma dimethacrylate  
**Formatray Liquid (Custom Tray Material):** methyl methacrylate monomers  
**Pormatray Powder:** polymethyl methacrylate  
**Fortify:** urethane dimethacrylate, ethoxylated bisphenol a dimethacrylate  
**Fortify Plus:** urethane dimethacrylate, ethoxylated bisphenol a dimethacrylate  
**Functional Impression Tissue Toner (Fitt) Powder:** polyethyl methacrylate  
**Fuji 2:** hydroxyethyl methacrylates  
**Fuji:** 2-hydroxyethyl-methacrylates  
**Fynal Liquid:** zinc oxide eugenol permanent cement  
**Fynal Powder:** zinc oxide  
**G-400 Series:** calcium sulfate hemihydrate  
**GlossCote Light-Cured Acrylic Varnish:** methyl methacrylate monomer, inhibited  
**Glu/Sense:** 2-hydroxyethyl methacrylate, pentanediol, 5% glutaraldehyde.  
**Gluma Comfort Bond:** 2-hydroxyethyl-methacrylates  
**Gluma One Bond:** 2-hydroxyethyl-methacrylates  
**Gold Alloys (Noble):** allergy to some alloys  
**Guardian Seal:** methacrylates  
**Gutta Flow:** zinc oxide  
**Gutta Percha:** zinc oxide  
**Hard Core:** methacrylate resins  
**Heat Cure Denture Acrylic-Powder (Niranium):** titanium dioxide  
**Heat Cure Denture Acrylic-Liquid (Niranium):** methyl methacrylate  
**Heat Cure Nobiltone Liquid:** methyl methacrylate  
**Heat Cure Nobiltone Powder:** titanium dioxide  
**Heliomolar:** dimethacrylates  
**HEMA Composite:** hydroxy ethyl dimethacrylate  
**Herculite XR Paste Products:** uncured methacrylate ester monomers  
**Herculite XRV Paste Products (restorative composite):** uncured methacrylate ester monomers  
**High Impact-45 Denture Acrylic Liquid:** methyl methacrylate, trimethylolpropane, trimethacrylate  
**Histocryl:** hydrophilic methacrylate, methacrylate ester  
**Hi-X Base:** dimethacrylates  
**Hy-Bond (shofu):** zinc oxide  
**Hydro-Cast Tissue Treatment Material, Powder:** polyethyl methacrylate and higher acrylic ester polymer  
**Hydro-Cast Tissue Treatment Material, Powder:** polyethyl methacrylate and higher acrylic ester  
**Hybrid Composite (anterior/posterior):** urethane dimethacrylate, aliphatic dimethacrylate, aromatic dimethacrylate  
**Hydrogel Desensitiser:** 2-hydroxy ethyl methacrylate  
**Hydrosil XT:** calcium sulfate, titanium dioxide  
**Hyflo Fluid Resin (Liquid):** inhibited methyl methacrylate, n,n-dimethyl-p-toluidine, ethylene glycol dimethacrylate  
**Hygenic Repair Resin (Liquid):** inhibited methyl methacrylate, inhibited n,n-dimethyl-p-toluidine, inhibited ethylene glycol dimethacrylate  
**Hygenic Denture Resin (Liquid):** inhibited methyl methacrylate, inhibited ethylene glycol dimethacrylate  
**Hygenic 007 Monomer (Liquid):** inhibited methyl methacrylate, n,n-dimethyl-p-toluidine, inhibited ethylene glycol dimethacrylate  
**Hygenic Orthodontic Resin (Liquid):** inhibited methyl methacrylate, inhibited n,n-dimethyl-p-toluidine, inhibited ethylene glycol dimethacrylate  
**Hygon Tray Material (Liquid):** inhibited methyl methacrylate, inhibited n,n-dimethyl-p-toluidine, inhibited ethylene glycol dimethacrylate  
**Hylyne Base Paste:** calcium hydroxide, zinc oxide, butyl benzene sulfonamide  
**Hypar Denture Resin (Liquid):** inhibited methyl methacrylate, inhibited ethylene glycol dimethacrylate  
**Hypocal SN:** calcium hydroxide  
**Ideal 1:** 2-hydroxyethylmethacrylate  
**Ideal 1 Adhesion System Primer:** 2-hydroxyethylmethacrylate  
**Ideal Glass Ionomer Band Cement:** methacrylates  
**Ideal Light Cure Bracket Adhesive:** methacrylates  
**Ideal Resin Bonding Agent:** methacrylates  
**Illusion Base:** ethoxylated bisphenol A dimethacrylate, triethyleneglycol dimethacrylate  
**Illusion Catalyst:** bisphenol A diglycidyl-methacrylate, triethyleneglycol dimethacrylate  
**Illusion Color Modifier:** triethyleneglycol dimethacrylate  
**Illusion Viscosity Modifier:** ethoxylated bisphenol a dimethacrylate  
**Immediate Liquid:** methyl methacrylate  
**Instant Tray Mix Liquid:** methyl methacrylate, n,n-dimethyl-p-toluidine  
**Instant Tray Mix Powder:** methyl methacrylate/ethyl acrylate  
**Integrity:** polymerizable dimethacrylate resins  
**Interface B:** Trimethoxysilyl Propyl Methacrylate  
**Interval II:** zinc oxide  
**Intro Bonding Resin:** bisphenol diglycidyl-methacrylate  
**Investment 847, 847BB:** titanium dioxide  
**Ionosit Microspand:** aliphatic dimethacrylate, aromatic dimethacrylate, polycarboxylic polymethacrylate  
**Ionosit Baseliner:** aliphatic dimethacrylate, aromatic dimethacrylate, polycarboxylic polymethacrylate  
**IRM powder:** zinc oxide  
**Jet Acrylic Powder-Jet Tooth Shade, Jet Denture Repair, Ortho-Jet:** plasticized methacrylate polymer  
**Jet Adjuster Brush Cleaner:** methyl methacrylate  
**Jet Liquid, Ortho-Jet Liquid:** methyl methacrylate, n,n-dimethyl-p-toluidine  
**Jet Seal:** methyl methacrylate  
**Jet Tray Liquid:** methyl methacrylate, n,n-dimethyl-p-toluidine  
**Jet Tray Powder:** plasticized methacrylate polymer  
**Justi Tray Material liquid:** methyl-methacrylate  
**Kalsogen Plus Liquid:** eugenol  
**Kalsogen Plus Powder:** zinc oxide  
**Kalzinol Liquid:** eugenol  
**KaVo Rondoflex 2013 Powder 50um 100g ref: 1.000.5955 in PE Container:** titanium dioxide  
**KaVo Rondoflex 2013 Powder 27um 100g ref: 1.000.5955 in PE Container:** titanium dioxide  
**Kayon Denture Tinting Stain Special Liquid:** methacrylate monomer, inhibited  
**Kevloc Primer:** methacrylates  
**Kolor +:** uncured methacrylate ester monomers  
**Lasting Touch:** urethane dimethacrylate resin  
**Ledermix Powder (cement):** zinc oxide, calcium hydroxide, Canada balsam  
**Life:** zinc oxide, ethyltoluene sulfonamide, calcium hydroxide, titanium dioxide, barium sulphate  
**Light Core:** bisphenol diglycidylmethacrylate, ethoxylated bisphenol a dimethacrylate  
**Light-Curable Block Out Resin:** aromatic and aliphatic dimethacrylate  
**Light Cure Composite Microhybride:** mixture of resins based on bis-gma (methacrylates)  
**Light Cure Dental Composite (Ecu-sphere):** urethane dimethacrylate, aliphatic dimethacrylate, aromatic dimethacrylate  
**Light Cure Dental Composite:** urethane dimethacrylate, aliphatic dimethacrylate, aromatic dimethacrylate  
**Light Cure Dental Composite (Ecusit):** urethane dimethacrylate, aliphatic dimethacrylate, aromatic dimethacrylate  
**Light Cure and Dual Cure:** methacrylates  
**Light Curing low-shrinkage Dental Restorative:** bis-gma, urethane dimethacrylate

- Light and self-cure Dental Resins:** Heli-molar
- Light Cured Space Maintainer Syringe:** aromatic aliphatic dimethacrylate monomers
- Liquidam:** aromatic and aliphatic dimethacrylate monomers
- LR Gold:** dimethacrylate resin, methacrylate ester, dimethyl para toluidine
- LR Gold Resin:** c12 methacrylate ester
- LR White:** dimethacrylate resin, methacrylate ester, dimethyl para toluidine
- LuxaBite:** urethane dimethacrylate, aromatic dimethacrylate, glycol methacrylate
- LuxaCore, LuxaCore Dual:** urethane dimethacrylate, aliphatic dimethacrylate, aromatic dimethacrylate
- Luxatemp, Luxatemp Solar, Luxatemp Fluorescence:** urethane dimethacrylate, aromatic dimethacrylate, glycol methacrylate
- Magic Fil:** aliphatic dimethacrylate, aromatic dimethacrylate, carboxylic methacrylate
- Matrix Carbio adhesive:** glycerol dimethacrylate
- Matrix Cabrio Catalyst:** n-toluene glycine, glycidil methacrylate
- Maxcem Elite:** methacrylates
- Maxcem Paste Products:** uncured methacrylate ester monomers
- MCP 15 Metal Casting Plaster, MCP 16 Metal Casting Plaster:** titanium dioxide
- Meliobond:** methyl methacrylate
- Meliodent Heat Cure Liquid:** methacrylates
- Meliodent Heat Cure Powder:** methacrylate copolymerisates
- Meliodent Orthodontic Liquid:** methacrylates
- Metal Primer:** alkyl dimethacrylate resins
- Microlon Denture Resin (Liquid):** inhibited methyl methacrylate, inhibited ethylene glycol dimethacrylate
- Microprime:** hydroxyethyl methacrylate
- Miris:** methacrylates
- Modern Tenacin:** zinc oxide
- Modeling Resin:** urethane dimethacrylate, ethoxylated bisphenol a dimethacrylate
- Mucosoft Adhesive Agent:** methyl methacrylate
- Multi-Cal (Multi, Multi-3):** calcium hydroxide
- Myerson Special Crown/Bridge Opaque Powders:** titanium dioxide
- Natural Cure Pate/Paste Dental Composite/Core:** bisphenol a diglycidyl methacrylate
- Neo Adhesive and Primer:** triethyleneglycoldimethacrylate, 20hydroxyethylmethacrylate
- New Outline Skin Bonding:** methacryl acid ester, methyl-methacrylate
- New Outline Liquid:** methyl-methacrylate xi; r 37/38
- New Outline Skin Primer:** 80-62-6 methyl methacrylate
- New Outline Powder:** acryl-resin on base of polymethylmethacrylate
- New Outline Skin Primer:** methylmethacrylate
- New Outline Skin Glaze:** methyl methacrylate, aromatic urethane acrylate
- Nexus 2 paste products:** uncured methacrylate ester monomers
- Nickel or Cobalt-chrome (Base-metal) Alloys:** nickel allergies are common among women.
- Niranium Alloy 1-2-3:** nickel, aluminum, beryllium
- Nomix Temporary Cement:** d.m.t.g., ethyl methacrylate polymer, calcium sulphate, zinc oxide, triacetin, potassium sulphate
- Non-Eugenol Temporary Cement:** polymerizable methacrylates
- NS Bond Universal Denture Primer:** 2-hydroxy ethyl methacrylate
- NX3 Nexus Third Generation Paste Products:** uncured methacrylate ester monomers
- Odus stone cement, liquid:** zinc oxide
- One Coat Bond:** hydroxyethylmethacrylate, methacrylates
- One-UP Bond F Bonding Agent A:** methacrylates
- One Step:** biphenyl dimethacrylate, hydroxyethyl methacrylate
- One Step Plus:** biphenyl dimethacrylate, hydroxyethyl methacrylate
- Opaker:** uncured methacrylate ester monomers
- Optibond Dual Cure Paste:** uncured methacrylate ester monomers, triethylene glycol dimethacrylate
- Optibond FL Adhesive Resin:** uncured methacrylate ester, dimethacrylate
- Optibond Light Cure Adhesive Resin:** uncured methacrylate ester monomers
- Optibond Dual Cure Activator Resin:** uncured methacrylate
- Optibond Solo:** dimethacrylates
- Optiguard:** methacrylates
- Optilon High Impact Denture Resin:** compounded polymethyl methacrylate
- Optilon 399 High Impact Denture Resin (Liquid):** inhibited methyl methacrylate, inhibited ethylene glycol dimethacrylate
- Orafil-Plus:** zinc oxide
- Orafil-G:** zinc oxide
- Ortho-Choice OBA:** Methacrylate resins
- Ortho-Jet Tinting Concentrate:** methyl methacrylate, n,n-dimethyl-p-toluidine
- Ortho Loc Paste:** dimethacrylate
- Ortho Loc Primer:** dimethacrylate, methacrylates
- Paint On Color:** methacrylates
- Paint On Dental Dam:** methacrylates
- Palabond:** methyl methacrylate, methacrylic acid
- Paladon 65 Liquid:** methacrylates
- Paladon 65 Powder:** methacrylate copolymerisates
- Paladur Liquid:** methyl methacrylate
- Paladur Powder:** methacrylate copolymerisates
- Palapress Vario Liquid:** methyl methacrylate, ethylene dimethacrylate
- Palapress Vario Powder:** methacrylate copolymerisates
- Palaseal:** methyl methacrylate
- Palavit G LC K I:** triethyleneglycoldimethacrylate
- Palavit G LC Modelling Liquid:** triethyleneglycoldimethacrylate
- Palavit 55 VS Liquid:** methyl methacrylate
- Parabond adhesive A:** hydroxyethylmethacrylate, methacrylates
- ParaBond Non Rinse Conditioner:** hydroxyethylmethacrylate cas-no 868-77-9
- ParaCem Universal DC (base):** methacrylates
- ParaCem Universal DC (catalyst):** methacrylates
- Paragon Denture Resin (Liquid):** inhibited methyl methacrylate, inhibited ethylene glycol dimethacrylate
- ParaPost Cement Base:** methacrylates
- ParaPost Cement Catalyst:** methacrylates
- ParaPost Cement Conditioner A:** hydroxyethylmethacrylate, methacrylates
- PbS core EviDots in PMMA:** lead sulfide, polymethyl methacrylate
- “PD” chemical cure hybrid composite, base:** bis-gma (bis phenol a-glycidyl methacrylate) hexandioldmethacrylate
- “PD” chemical cure hybrid composite catalyst:** bis-gma (bis phenol a-glycidyl methacrylate) hexandioldmethacrylate
- “PD” rosen root canal sealer:** zinc oxide
- “PD” tempotec:** zinc oxide
- PDMA Composite:** polycarbonate dimethacrylate resin
- Perfectemp II Temporary Cement:** urethane dimethacrylate, aromatic dimethacrylate, glycol methacrylate
- Perm Reline/Repair Resin (Liquid):** inhibited methyl methacrylate, inhibited n,n-dimethyl-p-toluidine, inhibited ethylene glycol dimethacrylate
- Permacec, Permacec Dual:** aliphatic dimethacrylate, aromatic dimethacrylate, carboxylic methacrylate bisphenol a. (bowen resin) toxic when uncured
- Phthalates:** (DBP Dibutyl phthalate and DOP)
- PI-KU-Plast Monomer Blue:** methyl-methacrylate
- PI-KU-Plast Monomer Orange:** methyl-methacrylate
- PI-KU-Plast Monomer Red:** methyl-methacrylate
- PI-KU-Plast Monomer Transparent:** methyl-methacrylate
- PI-KU-Plast Monomer Yellow:** methyl-methacrylate
- Point 4:** uncured methacrylate ester monomers
- Point 4 flowable optimized particle composite system:** uncured methacrylate ester monomers
- PolyCarboxylate Cement powder:** zinc oxide
- PolyCarb Waterset:** zinc oxide
- Poly-F Plus:** zinc oxide

- Porcelain fused- to- metal:** allergy to metal alloys
- Porcelain Liner M Liquid A:** methyl methacrylate
- Porcelain Liner M Liquid B:** methyl Methacrylate
- Post Cement Hi-X base/catalyst:** bisphenol a diglycidylmethacrylate, ethoxylated bisphenol a dimethacrylate (base only) triethyleneglycol dimethacrylate
- Post Cement Hi-X Base/Catalyst:** bisphenol A diglycidylmethacrylate, triethyleneglycol dimethacrylate
- Powder free natural latex rubber-dental dam material:** titanium dioxide
- Pre-Bond Resin:** bisphenol a diglycidylmethacrylate, triethyleneglycol dimethacrylate
- Preformed Aluminium Crown:** zinc, titanium
- Precision Resin (liquid):** methyl methacrylate 1.4 butanediol dimethacrylate
- Premium Denture Acrylic Liquid:** methyl methacrylate, trimethylolpropane, trimethacrylate
- Premium Powder:** methacrylate polymer
- Premium Super-20 Denture Acrylic Liquid:** methyl methacrylate
- Premium Super-20-Powder:** methacrylate polymer
- Premisa low shrinkage composite system:** uncured methacrylate ester monomers
- Premise:** methacrylates
- Premise low shrinkage composite system:** uncured methacrylate ester monomers
- Premise flowable optimized particle composite system:** uncured methacrylate ester monomers
- Prime & Bond:** toluenesulfinate
- Prime & Bond NT:** urethane dimethacrylate resin, polymerizable dimethacrylate resins, polymerizable trimethacrylate resins
- Primer liquid A, clearfil liner bond:** 2-hydroxyethyl methacrylate, hydrophilic dimethacrylate, 10-methacryloyloxydecyl, dihydrogen phosphate, n,n-diethanol-p-toluidine
- Primer liquid B, clearfil liner bond:** 2-hydroxyethyl methacrylate, hydrophilic dimethacrylate
- Primer liquid, clearfil protect bond:** 2-hydroxyethyl methacrylate, hydrophilic dimethacrylate
- Prisma APH:** urethane modified bis-gma dimethacrylate, polymerizable dimethacrylate resin
- Prisma VLC Dycal:** calcium hydroxide, barium sulfate, urethane dimethacrylate resin, polymerizable dimethacrylate resin
- PrepEze desensitizer:** hydroxyethyl methacrylate
- ProBond Adhesive :** ( all purpose bonding agent) urethane dimethacrylates resin, polymerizable dimethacrylate resin
- Prodigy:** uncured methacrylate ester monomers
- Prodigy condensable:** uncured methacrylate ester monomers
- ProSciTech:** hydrophilic methacrylate mixture, c12 methacrylate ester
- Provisional Monomer:** alky methacrylate, dimethylp-toluidine
- Pulpdent:** zinc oxide
- Pulpdent Pulp Capping Paste (PSYK,PSY):** calcium hydroxide
- Pulpdent Cavity Liner (PCL):** calcium hydroxide
- Pulpdent Lime-Lite:** uncured urethane dimethacrylate resin
- Pulpdent TempCanal (PTCK,PTC):** calcium hydroxide
- Pulpdent Multi-Cal (MULTI,MULTI-3):** calcium hydroxide
- Calcium Hydroxide Powder (CH4,CH16):** calcium hydroxide
- Pulpdent Paste (PSYK,PSY,PSYN):** calcium hydroxide
- Pulpdent Root Canal Sealer Liquid (RSL,RSL-2):** 2-methoxy-4-(2 propenyl) phenol
- Pulp Canal Sealer Powder:** zinc oxide
- Pulpotec powder:** zinc oxide
- Pyramid Enamel:** ethoxylated bisphenol a dimethacrylate, triethyleneglycol dimethacrylate
- Pyramid Dentin:** bisphenol diglycidylmethacrylate, ethoxylated bisphenol a dimethacrylate, triethyleneglycol dimethacrylate
- Quadrant Anterior Shine:** methacrylate
- Quadrant FiniSense:** methacrylates
- Quadrant Unichem Base:** methacrylates
- Quadrant Unibond S:** methacrylate
- Quadrant Uni-1-Bond:** methacrylates
- Quala:** precapsulated dental amalgam
- Quixfil:** methacrylate
- Quixx:** ethoxylatedbisphenol a dimethacrylate, polymerizable carboxylic acid dimethacrylate resin, triethyleneglycoldimethacrylate, polymerizable trimethacrylate resin
- Regisil:** titanium dioxide
- Relate Monomer:** isobutyl methacrylate monomers, ethylene glycol dimethacrylate monomers, n,n-dimethyl-p-toluidine
- Repair Liquid:** Methyl Methacrylate
- Reposil Impression Material:** titanium dioxide
- ResiLute Multi-Purpose Resin:** methacrylate resins
- Resiment Ready-Mix Catalyst:** bisphenol a diglycidyl-methacrylate
- Resin Liquid:** methyl methacrylate
- Resin plus light curing liquid:** Methyl Methacrylate
- Resin plus liquid varnish:** Methyl Methacrylate
- Resin Plus Opaque Powder:** titanium dioxide
- ResinCap Powder:** Plasticized methacrylate polymer
- Resin, teenthmate F-1:** bisphenol a polyethoxy dimethacrylate, triethyleneglycol dimethacrylate, 10methacryloyloxydecyl dihydrogen phosphate, 2-hydroxyethyl methacrylate
- Resinomer Base:** bisphenol a diglycidylmethacrylate, hydroxyethyl methacrylate
- Resinomer Catalyst:** triethyleneglycol dimethacrylate, diphenylsulfone dimethacrylate
- Revolution-formula2:** uncured methacrylate ester monomers
- RockoSeal Single Dose:** Polydimethylpolymethylhydrogensiloxane
- Rubber base adhesive:** toluene
- Scotchbond Multi-Purpose:** 2-hydroxyethyl-methacrylates
- Sealacore Activator:** methacrylates
- Sealacore Bonding:** methacrylates
- Sealapex:** ethyltoluene sulfonamide, zinc oxide, calcium oxide, titanium dioxide, barium sulphate
- Sealite natural resin:** uncured methacrylate ester monomers
- Seal & Protect:** methacrylate
- Sealite opaque resin:** uncured methacrylate
- Seal-rite UDMA pit and fissure:** urethane dimethacrylate and methacrylate resin
- Seal-rite low viscosity pit and fissure sealant:** methacrylate resin
- Self Curing Denture Liquid:** methyl methacrylate, n,n-dimethyl-p-toluidine
- Sedanol Liquid:** eugenol
- Seal & Protect:** methacrylate
- Sedanol Powder:** zinc oxide, eugenol
- Self Curing Denture Powder:** Plasticized methacrylate polymer
- Sensi-Temp Resin Temporary Cement-base:** multifunctional methacrylates, polymerization activator
- Silibond:** meth methacrylate, bisphenol a-bis (hydroxypropylmethacrylate), triethyleneglycoldimethacrylate
- Silicate Cement, Liquid:** zinc oxide
- Silicoup B:** trimethoxysilylpropyl methacrylate
- Silvaloy 35:** zinc, cadmium, copper, silver
- Silvaloy 45:** zinc, copper, silver, cadmium
- Silvaloy A50N:** zinc, nickel, copper, silver
- Silcaloy 45 Flux Coated Rod:** zinc, copper, cadmium, silver, flux
- Silvacore A50N Flux Cored:** zinc, nickel, silver
- Silcaloy A50N Flux Coated Rod:** zinc, nickel, copper, silver
- Smartemp (all Shades):** uncured methacrylate ester monomers
- Snap bond dentin adhesive:** 2-hydroxyethyl methacrylate
- Snap Monomer:** Isobutyl methacrylate monomer, ethylene glycol dimethacrylate monomers, n,n-dimethyl-p-toluidine
- Snap resin (powder) without Cadmium:** titanium dioxide
- Soleil:** urethane dimethacrylate, aliphatic dimethacrylate, aromatic dimethacrylate
- Sparkle Ortho-Jet Powder:** methacrylate copolymer
- Spectrapoint Gutta Percha Points:** usp zinc oxide
- Spectrum TPH:** methacrylate
- Splintline Liquid:** dimethyl-p-toluidine



**Splintline Powder:** methacrylate polymer  
**Structure 2 SC:** dimethacrylates  
**Successful Gutta Percha Compound:** Zinc Oxide, fd&c  
**Sultan:** eugenol  
**Sultan Sensi-Temp:** multifunctional methacrylates  
**Supa Glue:** poly(methyl methacrylate  
**Surefil (High density posterior composite):** urethane modified bis-gma dimethacrylate, polymerizable dimethacrylate resin  
**Surpass 2:** Hydroxyethyl methacrylate  
**Surpass 3:** Triethylene Glycol Dimethacrylate  
**Suspension Polymer:** methacrylates  
**Sybraloy Precapsulated:** Mercury, alloy powder contains silver, tin and copper metals  
**Synergy Compact:** methacrylates  
**Synergy Duo Shade:** methacrylates  
**Synergy Flow:** methacrylates  
**Synergy Super White:** methacrylates  
**Synergy Transparent:** methacrylates  
**TEGMA Composite:** triethylene glycol dimethacrylate resin  
**Teethmate F-1 (Natural):** triethyleneglycol dimethacrylate, methacryloylfluoride-methyl methacrylate copolymer, hydrophobic aromatic dimethacrylate  
**Teco:** aromatic dimethacrylate, polyol-mono-, dimethacrylate, polycarboxylic polymethacrylate  
**TempART Acrylic Resin Powder:** methacrylate copolymer  
**Tempfil Paste Products Inlay/Onlay:** uncured diacrylate ester monomers  
**Temptation:** polyfunctional acrylates, methacrylates, unsaturated esters, malonyl urea derivatives  
**TempCanal (PTCK,PTC):** calcium hydroxide  
**Temporary Bridge Resin Liquid:** methyl methacrylate, polymerizable dimethacrylate  
**Temporary Dental Stopping:** gutta percha sheets or rods, zinc oxide  
**Temp Bond Base:** zinc oxide  
**Temp-Bond Accelerator:** eugenol  
**Temp Glaze:** methyl methacrylate  
**Tempit:** urethane dimethacrylate  
**TempoCem NE:** zinc oxide  
**TempoCem.TempoCem Soft:** zinc oxide, eugenol  
**Tempory Bridge Liquid:** methyl methacrylate

**Temporary Dental Stopping:** zinc oxide  
**Temposil:** Zinc Oxide  
**Tempase Base Paste:** uncured methacrylate ester monomers  
**Tempase Catalyst Paste:** uncured methacrylate monomers  
**TempSpan:** bis-gma, methacrylates  
**Temrex Cement Powder:** zinc oxide  
**Tetrahydrofurfuryl Methacrylate:** ( HQ, MEHQ, etc)  
**TimeLine VLC Baseline with dentin primer:** urethane Dimethacrylate  
**Titan:** Triethylene Glycol Dimethacrylate  
**TotalBond Liquid:** 2-hydroxyethyl methacrylate, 4-methacryoxyethyltrimellitic acid anhydride, diacrylate of polycondensate of bisphenol a glycidyl ether, dimethacrylate of polycondensate of bisphenol a and glycol, dimethacrylate of polycondensate of glycol  
**TotalBond Powders (light,medium and dark):** copolymer of methacrylates  
**TPH 3 Micro:** titanium dioxide, urethane modified bis-gma dimethacrylate, polymerizable dimethacrylate resin  
**TPH Spectrum:** urethane modified bis-gma dimethacrylate, polymerizable dimethacrylate resin  
**TR2 Temporary Cement:** uncured acrylate, methacrylate ester monomers  
**Triethylene Glycol Dimethacrylate:** toxic when uncured  
**Triphasix Aliginate Tray Adhesive:** Toulene  
**Tubli-Seal:** zinc oxide, eugenol  
**Tubulitee Cavity Liner:** calcium hydroxide  
**Turbo Temp:** multifunctional methacrylates  
**Turbo Temp 2:** multifunctional methacrylates  
**Twinlook Cement Base:** methacrylates  
**Twinlook Cement Cat:** methacrylates  
**Tylok-Plus:** zinc oxide, polyacrylic acid  
**Tyrian SPE Part B:** bis 2-methacryloyloxy  
**Tytin FC:** Mercury, alloy powder contains silver, tin and copper metals  
**Tytin, Precapsulated:** Mercury, alloy powder contains silver, tin and copper ,etals.  
**UDMA Composite:** urethane dimethacrylate resin  
**Ultrafil Gutta Percha cannules:** usp zinc oxide, barium sulfate  
**Unicem: (relyx unicem):** methacrylates; dimethacrylates  
**Unicem Rely X:** methacrylates, dimethacrylates

**Universal liquid, clearfil new bond:** n,n-diethanol p-toluidine  
**Universal liquid, clearfil photo bond:** n,n-diethanol p-toluidine  
**Universal paste, clearfil core new bond:** bisphenol a diglycidylmethacrylate, triethyleneglycol dimethacrylate, n,n-diethanol-p-toluidine  
**U/P Root Canal Powder:** zinc oxide  
**VersaFlo:** glycol methacrylate, multifunctional methacrylates, barium glass  
**Versa-Temp Temporary Crown:** methacrylates  
**Vertex Castapress Liquid:** methacrylate  
**Vertex Castavaria Liquid:** methacrylate  
**Vertex Castavite Liquid:** methacrylates  
**Vertex Implacryl Cold Liquid:** methacrylates  
**Vertex Self Curing Liquid:** methacrylate  
**Vertex Rapid-Simplified Liquid:** methacrylate  
**Vertex Regular:** methacrylate  
**Vipi cril, vipi flash, vipi cor, vipi wave, stg and ortho cril-liquid:** methacrylates  
**Visco-Gem Opaquer Liquid:** methyl methacrylate  
**Vitapex:** calcium hydroxide  
**Vitique:** aliphatic dimethacrylate, aromatic dimethacrylate, carboxylic methacrylate  
**Vitre-Bond:** dimethacrylates  
**3RM Liquid:** zinc oxide, eugenol  
**3M single bond (Ad Per):** dimethacrylates, methacrylates  
**Wachs Root Canal Powder:** zinc oxide  
**Xeno III:** hydroxyethyl methacrylate  
**Xeno IV:** urethane dimethacrylate resin, dipentaerythritol pentaacrylate phosphate, polymerizeable dimethacrylate resin  
**XP Bond:** dimethacrylate resins  
**XR Bond Adhesive Resin:** uncured methacrylate ester monomers alkyl dimethacrylates  
**XR Bond Primer:** alkyl dimethacrylate resins  
**Zical:** zinc oxide  
**Zinc Oxide Powder:** zinc oxide, eugenol  
**Zinocol Polymer Reinforced Zoe Cement:** zinc oxide, eugenol  
**Zinroc Cement Powder:** zno  
**Zircate Propy Paste:** tin oxide  
**Zoe B & T Liquid:** eugenol  
**Zoe B & T Powder:** zinc oxide  
**2 bond 2 Base:** dodecandioldimethacrylate  
**2bond 2 Cat:** dodecandioldimethacrylate  
**3C-Bond:** titanium dioxide  
**50/50 Core Mix:** titanium dioxide

## Attention Event Planners!

It is our pleasure to supply courtesy paper copies of **EXPLORE! For the Professional and Health Conscious** at your next conference, workshop or seminar, for every single attendee packet!

Call **800.320.6035** for information on available topics.



## References

- Amin, O. M. 1996. Facial cutaneous dermatitis associated with arthropod presence *Explore for the Professional*, Volume 7, #2: 62-64.
- Amin, O. M. 2001. Neuro-cutaneous Syndrome (NCS): a new disorder. *Explore for the Professional*, Volume 10m #2: 55-56.
- Amin, O. M. 2003. On the diagnosis and management of Neuro-cutaneous Syndrome (NCS), a toxicity disorder from dental sealants. *Explore for the Professional*, Volume 12, #6: 21-25.
- Amin, O. M. 2004 a. Dental sealant toxicity: Neuro-cutaneous Syndrome (NCS), a dermatological and neurological disorder. *Holistic Dental Association Journal* 2004: 1-15.
- Amin, O. M. 2004 b. On the diagnosis and management of Neuro-Cutaneous Syndrome, a toxicity disorder from dental sealants. *California Dental Association Journal* 32: 657-663.
- Amin, O. M. 2004 c. On the course of Neuro-cutaneous Syndrome (NCS) and its pseudo-diagnosis by medical professionals. *Explore for the Professional*, Volume 13, #4: 4-9.
- Amin, O. M. 2005. Dental products causing Neuro-cutaneous Syndrome (NCS) symptoms in NCS patients *Explore for the Professional*, Volume 14, # 6: 57-64.
- Amin, O. M. 2006 a. On the diagnosis and management of Neuro-cutaneous Syndrome (NCS), a toxicity disorder from dental sealants. *Townsend Letter* 276: 85-90.
- Amin, O. M. 2006 b. An Overview of Neuro-cutaneous Syndrome (NCS) with a special reference to symptomology. *Explore for the Professional*, Volume 15, #3: 41-49.
- Amin, O. M. 2007. The face of Neuro-cutaneous Syndrome (NCS): new cases, recovery, and perspectives. *Explore for the Professional*, Volume 16, #6: 54-64.
- Amin, O. M. 2009. Recovery from Morgellons and Neuro-Cutaneous Syndrome (NCS): patients perspectives. *Explore for the Professional*, Volume 18, #6: 25-33.
- Amin, O. M. 2010. In their own words OR: symptoms of Morgellons and Neuro-cutaneous Syndrome (NCS) upon first examination at the Parasitology Center, Inc. (PCI). *Explore for the Professional*, Volume 19, #2: 24-31.

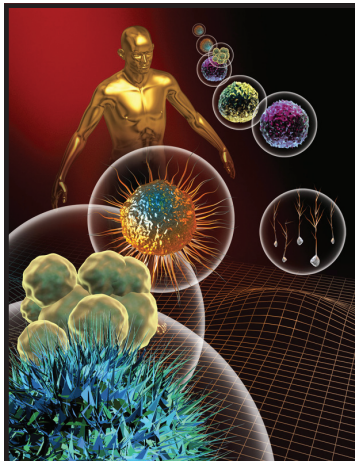
## About the Author



**Dr. Amin** earned his B.Sc. in Botany and Zoology and M. Sc. in Medical Entomology from Cairo University, and Ph.D. in Parasitology from Arizona State University. His professional training started at the US Naval Medical Research Unit #3 (NAMRU-3), Cairo as a Research Associate in Medical Zoology. His post-doctoral work was at Old Dominion University, Norfolk. He subsequently worked at CDC, Atlanta, 1969–1970, then at the University of Wisconsin as a Professor of Parasitology, Allied Health and Biology for 20 years. In 1992, he founded the Institute of Parasitic Diseases (IPD) (for research and clinical testing of human parasites). He has a joint laboratory facility in Mexico and Mali, West Africa as well as continued research association with NAMRU-3 in Cairo.

Dr. Amin is a nationally and internationally recognized authority in Parasitology. He specializes in the systematics, ecology and pathology of protozoans, helminths and arthropods. He has published over 185 major articles/book chapters/teaching videos on parasites from North America, Peru, Chile, North, South and East Africa, Persian Gulf, the Middle East, Taiwan, Japan, Thailand, Vietnam, Inner Mongolia (China), Russia and India. He is an active lecturer on parasitological and related disease topics to health care professional, allied health workers and medical students in seminar and workshop settings.

Dr. Amin is an active member in the American Society of Parasitologists (and its Rocky Mountain affiliate), British Society of Parasitology, Entomological Society of America, Helminthological Society of Washington, American Microscopical Society, Microbiology and Arizona Homeopathic and Integrative Medical Association.



**Doctor do you have case studies to share with your colleagues?**

Please submit them to:  
**EXPLORE! For the Professional and Health Conscious**  
 Call 800.320.6035 or 928.541.1920  
 or Fax 928.541.1906 for more information

**Ask for a Submission Outline**