Bisphenol A (BPA)-based epoxy polymers: Human health tier II assessment

28 June 2019

Chemicals in this assessment

Chemical Name in the Inventory	CAS Number
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 2-methyl-2-propenoate	61970-25-0
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, bis(2-methyl-2-propenoate)	62395-94-2
Fatty acids, tall-oil, polymers with bisphenol A and epichlorohydrin	66070-75-5
Fatty acids, soya, polymers with bisphenol A and epichlorohydrin	66070-76-6
Fatty acids, dehydrated castor oil, polymers with bisphenolA and epichlorohydrin	66070-77-7
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and soya fatty acids	66070-80-2
Fatty acids, dehydrated castor oil, polymers with adipic acid, bisphenol A, epichlorohydrin and trimellitic anhydride	66071-05-4

Chemical Name in the Inventory	CAS Number
Fatty acids, C18-unsaturated, dimers, polymers with aniline, bisphenol A, cyclohexylamine and epichlorohydrin	66071-09-8
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane and 4,4'-methylenebis[benzenamine]	40364-42-9
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	25036-25-3
1,2-Ethanediamine, polymer with 2,2'-[(1-methylethylidene) bis (4,1-phenyleneoxymethylene)] bis [oxirane]	27615-34-5
2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, ethenylbenzene and 4,4'-(1-methylethylidene)bis[phenol]	28262-39-7
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (butoxymethyl)oxirane and (chloromethyl)oxirane	29407-84-9
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane	31326-29-1
2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	36425-15-7
2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, 2,5-furandione and 4,4'-(1-methylethylidene)bis[phenol]	36425-16-8
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and methyloxirane	36484-54-5
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 1,2-ethanediamine	36704-31-1
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)	37225-26-6
2-Propenoic acid, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	37625-93-7

Chemical Name in the Inventory	CAS Number
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane	38294-69-8
5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	38415-60-0
Phenol,4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl) oxirane .alpha.-hydro-, .omega.-hydroxypoly (oxy-1,2-ethanediyl)	42617-82-3
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 2,2'-methylenebis[phenol]	51856-58-7
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, benzoate	52907-82-1
2-Propenoic acid, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	52985-33-8
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, di-2-propenoate	53814-24-7
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 2-propenoate	55818-57-0
Butanedioic acid, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	60815-61-4
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 1,2-benzenedicarboxylate 2-propenoate	61419-28-1
Guanidine, cyano polymer with phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with 2-methyl-1H-imidazole	61584-94-9
2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, ethenylbenzene, ethyl 2-propenoate and 4,4'-(1-methylethylidene)bis[phenol], compound with 2-(dimethylamino)ethanol	68957-91-5
2-Propenoic acid, monoester with 1,2-propanediol, polymer with (chloromethyl)oxirane, dihydro-2,5-furandione and 4,4'-(1-methylethylidene)bis[phenol]	68958-77-0

Chemical Name in the Inventory	CAS Number
Phosphoric acid, polymer with 4,4'-(1-methylethylidene)bis[phenol] and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	64346-82-3
Nonanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 4,4'-(1-methylethylidene)bis[phenol]	64365-56-6
Octadecanoic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 4,4'-(1-methylethylidene)bis[phenol]	64365-58-8
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, (Z,Z)-9,12-octadecadienoate (Z)-9-octadecenoate	64521-30-8
2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, ethenylbenzene, ethyl 2-propenoate and 4,4'-(1-methylethylidene)bis[phenol]	65308-20-5
Fatty acids, dehydrated castor oil, polymers with adipic acid, bisphenol A, epichlorohydrin and trimellitic anhydride, ammonium salts	66071-59-8
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (butoxymethyl)oxirane and (chloromethyl)oxirane, 2-propenoate	66085-58-3
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, benzenemethanol, neodecanoic acid, oxiranylmethyl ester and 1,3-benzenedimethanamine	69234-68-0
2-Propenoic acid, polymer with (chloromethyl)oxirane, 1,6-hexanediyl di-2-propenoate and 4,4'-(1-methylethylidene)bis[phenol]	66664-15-1
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, octadecanoate 2-propenoate	66746-11-0
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and diaminodiphenyl sulfone	67351-95-5
Tall oil, polymer with bisphenol A, epichlorohydrin, glycerol and phthalic anhydride	67745-98-6

Chemical Name in the Inventory	CAS Number
Fatty acids, linseed oil, polymers with bisphenol A and epichlorohydrin	67746-09-2
Phosphoric acid, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	67846-40-6
Hexadecanoic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 4,4'-(1-methylethylidene)bis[phenol]	67906-75-6
Benzoic acid, 4-amino-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	67906-76-7
Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	67924-34-9
Hexanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 4,4'-(1-methylethylidene)bis[phenol] and octadecanoic acid	67939-75-7
Fatty acids, C18-unsaturated dimers, polymers with bisphenol A and epichlorohydrin	67989-52-0
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with 2-methyl-1H-imidazole	68002-42-6
9,12-Octadecadienoic acid, (Z,Z)-, dimer, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	68003-11-2
Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), ether with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol]	68036-92-0
Oxirane, methyl-, polymer with oxirane, ether with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol]	68036-95-3
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, dodecanoate 2-propenoate	68071-07-8

Chemical Name in the Inventory	CAS Number
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with diisopropanolamine	68071-32-9
Tall oil, polymer with bisphenol A and epichlorohydrin	68092-35-3
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, methyloxirane and oxirane	68123-18-2
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, polymer with fatty acids, C18-unsaturated, dimers	68130-80-3
2-Oxepanone, polymer with (chloromethyl)oxirane, N-(1,3-dimethylbutylidene)-N'-[2-[(1,3-dimethylbutylidene)amino]ethyl]-1,2-ethanediamine, 2-(methylamino)ethanol, 4,4'-(1-methylethylidene)bis[phenol] and 2,2'-oxybis[ethanol], acetate (salt)	68134-56-5
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, ethyloxirane and oxirane	68140-38-5
2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol] and 4,4'-(1-methylethylidene)bis[phenol]	68140-84-1
Cellulose, acetate butanoate, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], triethoxyphenylsilane and 3-(triethoxysilyl)-1-propanamine	68310-22-5
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (butoxymethyl)oxirane and (chloromethyl)oxirane	68318-41-2
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)] and (chloromethyl)oxirane	68318-44-5
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 1-piperazineethanamine	68391-18-4

Chemical Name in the Inventory	CAS Number
2,5-Furandione, 3-(dodecenyl)dihydro-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	68399-66-6
Fatty acids, dehydrated castor oil, polymers with bisphenolA, epichlorohydrin and vegetable oil fatty acids	68410-25-3
1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with bisphenol A diglycidyl ether homopolymer	68411-71-2
Fatty acids, C18-unsaturated, dimers, polymers with triethylenetetramine, reaction products with poly[bisphenol A diglycidyl ether]	68424-41-9
2-Propenenitrile, polymer with 1,3-butadiene, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	68460-13-9
2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and 2-propenenitrile	68492-68-2
Castor oil, dehydrated, polymer with bisphenol A and epichlorohydrin	68515-14-0
1,2-Cyclohexanediamine, reaction products with 1,6-hexanediamine and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer	68609-07-4
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with (Z)-N-9-octadecenyl-1,3-propanediamine	68610-10-6
2-Propenenitrile, polymer with 1,3-butadiene, carboxy terminated, polymers with bisphenol A and epichlorohydrin	68610-41-3
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and phenyloxirane, reaction products with 4,4'-methylenebis[benzenamine]	68610-55-9
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, diethylenetriamine terminated	68610-56-0

Chemical Name in the Inventory	CAS Number
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with phenol and 2,4,4-trimethyl-1,6-hexanediamine	68610-57-1
Fatty acids, dehydrated castor oil, polymers with bisphenolA, epichlorohydrin and styrene	68647-99-4
2-Propenenitrile, polymer with 1,3-butadiene, carboxy terminated, polymer with bisphenol A diglycidyl ether	68648-83-9
Phenol, 4,4'-(1-methylethylidene) bis-, polymer with (chloromethyl) oxirane, reaction products with phenol	68649-35-4
2-Propenoic acid, polymer with 1,3-butadiene and 2-propenenitrile, reaction products with (bisphenol A, epichlorohydrinpolymer) and (3-carboxy-1-cyano-1-methylpropyl-terminated acrylonitrile, butadiene polymer)	68649-62-7
2-Propenoic acid, polymer with 1,3-butadiene and 2-propenenitrile, reaction products with (bisphenol A, epichlorohydrinpolymer) and (3-carboxy-1-cyano-1-methylpropyl, terminated polybutadiene)	68649-63-8
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]]	68683-13-6
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, N,N-diethyl-1,3-propanediamine and 1-piperazineethanamine	68698-70-4
Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, polymer with 2,2,4-trimethyl-1,6-hexanediamine	68845-20-5
Hexanedioic acid, polymer with acetic acid, (chloromethyl)oxirane, N-(1,3-dimethylbutylidene)-N'-[2-[(1,3-dimethylbutylidene)amino]ethyl]-1,2-ethanediamine, 2,2-dimethyl-1,3-propanediol, 2-(methylamino)ethanol, 4,4'-(1-methylethylidene)bis[phenol] and 2,2'-oxybis[ethanol]	105106-48-7

Chemical Name in the Inventory	CAS Number
Fatty acids, C16 and C18-unsaturated, polymers with bisphenol A, butoxymethyloxirane, epichlorohydrin and triethylenetetramine	105839-18-7
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and ethylenediamine	105839-24-5
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and triethlenetetramine	105839-25-6
9,12-Octadecadienoic acid, (Z,Z)-, dimer, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol], reaction products with 2,4,6-tris[2-(dimethylamino)ethyl]phenol, acetate (salt)	68891-68-9
Phenol, 4,4',-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with diethylenetriamine and 4-methyl-2-pentanone	68910-26-9
9,12-Octadecadienoic acid, (Z,Z)-, polymer with (chloromethyl)oxirane, ethenylbenzene, 4,4'-(1-methylethylidene)bis[phenol] and 2-methyl-2-propenoic acid	68928-91-6
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, C18-unsaturated fatty acid trimers and epichlorohydrin	68991-71-9
1-Piperazineethanamine, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	70776-37-3
Nonanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1, 3-dioxo-5-isobenzofurancarboxylic acid, 4,4'-(1-methylethylidene)bis[phenol] and (phenoxymethyl)oxirane	70776-48-6
Nonanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 4,4'-(1-methylethylidene)bis[phenol] and (phenoxymethyl)oxirane, compound with 2-(dimethylamino)ethanol	70776-49-7

Chemical Name in the Inventory	CAS Number
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, (chloromethyl) oxirane, ethenylbenzene, 4,4'-(1-methylethylidene)bis(phenol), methyl 2-methyl-2-propenoate and 2-propenoic acid	83770-98-3
Hexanedioic acid, polymer with (chloromethyl)oxirane, 2,2-dimethyl-1,3-propanediol and 4,4'-(1-methylethylidene)bis[phenol]	70468-11-0
Benzoic acid, 2-hydroxy-, reaction products with benzyl alcohol and polymer of bisphenol A-1,2-cyclohexanediamine and epichlorohydrin	71608-42-9
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 4,4'-sulfonylbis[benzenamine]	71745-12-5
2-Propenenitrile, polymer with 1,3-butadiene, carboxy terminated, polymer with bisphenol A diglycidyl ether homopolymer	72245-33-1
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, (butoxymethyl)oxirane and (chloromethyl)oxirane	72361-56-9
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with ethylenediamine	72480-18-3
1,6-Hexanediamine, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], acetate (ester)	73018-28-7
Decanedioic acid, polymer with (chloromethyl)oxirane, 2,2-dimethyl-1,3-propanediol and 4,4'-(1-methylethylidene)bis[phenol]	78705-33-6
Octadecanoic acid, hydroxy-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	79771-14-5
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, hexanedioate 2-propenoate	82600-83-7

Chemical Name in the Inventory	CAS Number
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	82783-88-8
Hexanedioic acid, polymer with (E)-2-butenedioic acid, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]], methyloxirane and oxirane	99328-61-7
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine, N,N'-bis(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane and 1,2-ethanediamine	102958-51-0
Fatty acids, dehydrated castor oil, reaction products with bisphenol A, epichlorohydrin polymer and soya fatty acids	103069-83-6
Fatty acids, linseed oil, reaction products with bisphenol A, epichlorohydrin polymer, maleic anhydride and soya fatty acids	103069-88-1
Fatty acids, soya, polymers with allyl alcohol, bisphenol A, epichlorohydrin, glycerol, phthalic anhydride and styrene	103069-92-7
Fatty acids, soya, reaction products with allyl alcohol styrene polymer, bisphenol A epichlorohydrin polymer and phthalic anhydride	103069-93-8
Fatty acids, C18-unsaturated, trimers, reaction products with bisphenol A, epichlorohydrin polymer and tallow alkyl amines, polymers with acrylonitrile	103331-96-0
Neodecanoic acid, oxiranylmethyl ester, polymer with 1,3-benzenedimethanamine and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	103777-71-5
Castor oil, dehydrated, polymer with (choromethyl)oxirane, 4,4''(1-methylethylidene)bis[phenol] and rosin	106232-88-6
Neodecanoic acid, oxiranylmethyl ester, polymer with 4,4'-methylenebis(benzenamine) and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]	111411-01-9

Chemical Name in the Inventory	CAS Number
Phenol, 2,2'-methylenebis-, polymer with 1,3-benzenedimethanamine, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]	111439-77-1
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 1,2-cyclohexanediamine, graft	111439-78-2
Phenol, 4,4'-(1-methylethylidene)bis-, polymers with 5-amino-1,3,3-trimethylcyclohexanemethanamine, 2,2-dimethyl-1,3-propanediamine, epichlorohydrin, epichlorohydrin-polyethylene glycol reaction products and polypropylene glycol mono-Me ether ether with trimethylolpropane (3:1)	111470-96-3
2-Propenenitrile, reaction products with 1,3-benzenedimethanamine polymers with bisphenol A diglycidyl ether	111497-84-8
Propanenitrile, 3-[(6-aminotrimethylhexyl)amino]-, polymers with 5-amino-1,3,3-trimethylcyclohexanemethanamine, bisphenol A, epichlorohydrin, epichlorohydrin-polyethylene glycol reaction products, polypropylene glycol diamine and 2,2,4(or 2,4,4)-trimethyl-1,6-hexanediamine	111497-85-9
Phenol 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with 2,2,4(or 2,4,4)-trimethyl-1,6-hexanediamine	111850-23-8
Castor oil, polymer with bisphenol A, diethylenetriamine, epichlorohydrin, 1-piperazineethanamine and triethylenetetramine	111905-58-9
Fatty acids, C16 and C18-unsaturated, polymers with acrylonitrile-1,4-butanediol reaction products, bisphenol A, C18-unsaturated fatty acid dimers, epichlorohydrin and ethylenediamine	111905-62-5
Fatty acids, C18-unsaturated, dimers, polymers with acrylonitrile-1,4-butanediol reaction products, bisphenol A, epichlorohydrin and ethylenediamine	111905-65-8
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, C18-unsaturated fatty acid trimers, epichlorohydrin and triethylenetetramine	111905-66-9

Chemical Name in the Inventory	CAS Number
Fatty acids, coco, polymers with bisphenol A and epichlorohydrin	113089-60-4
Fatty acids, coco, polymers with bisphenol A, conjugated sunflower oil fatty acids, C18-unsaturated fatty acid dimers and epichlorohydrin	113089-61-5
Reaction product of 1,3-benzenedimethanamine and 4,4'-(1-methylethylidene)bisphenol, polymer with (chloro)methyloxirane	113930-69-1
1,3-Benzenedicarboxylic acid, polymer with (chloromethyl)oxirane, 2,5-furandione, 4,4'-(1-methylethylidene)bis(phenol) and 1,2-propanediol, block	115047-96-6
1,2-Ethanediol, polymer with (chloromethyl)oxirane, 2,5-furandione, 4,4'-(1-methylethylidene)bis(phenol) and 1,1'-((1-methylethylidene)bis(4,1-phenyleneoxy))bis(2-propanol) , block	115047-97-7
Phenol, 4,4'-(1-methylethylidene) bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], and 2,5-furandione and fatty acids, C16-18 and C18-unsaturated, graft	116438-53-0
Phenol, 4,4'-(1-methylethylidene) bis-, polymer with (chloromethyl) oxirane, 2-(dimethylamino)ethanol and phosphoric acid	116889-75-9
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(3-aminopropyl)-1,3-propanediamine, (chloromethyl)oxirane and [[4-(1,1-dimethylethyl)phenoxy]methyl]oxirane, graft	118685-36-2
Hydrogenated C36 dimer fatty acid, polymer with fatty acids, C16-C18 and C18-unsaturated, bisphenol A diglycidyl ether,diethylenetriamine, N-methylolacrylamide, carbon dioxide, phenyl glycidyl ether and pentaethylene hexamine	119298-91-8
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A and epichlorohydrin, graft	119298-94-1
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and 1,1'-methylenebis[4-isocyanatobenzene]	119796-38-2

Chemical Name in the Inventory	CAS Number
Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, butyl glycidyl ether, epichlorohydrin and triethylenetetramine	120034-78-8
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)], (chloromethyl)oxirane and 1-piperazineethanamine	124100-06-7
Linseed oil, heat polymerized, polymer with 3,6,9,12-tetraazatetradecane-1,14-diamine and 1,2-ethanediamine,N-(2-aminoethyl)-N'[2-[(2-aminoethyl)amino]ethyl]- and oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer	124128-87-6
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with reduced 1,1'-[methylenebis(oxy)]bis[2-chloroethane], sodium sulfide (Na2S) polymer	124358-36-7
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, polymer with methyl 2-methyl-2-propenoate	128093-67-4
C18-Unsaturated fatty acid dimers, polymer with tall oil fatty acids, bisphenol A diglycidyl ether, diethylene triamine, N-methylolacrylamide, phenyl glycidyl ether and polyethylenepolyamines	128824-27-1
2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol, polymer with (chloromethyl)oxirane, ethenylbenzene, ethyl 2-propenoate, 4,4'-(1-methylethylidene)bis[phenol] and 2-propenoic acid	132378-53-1
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)] and (chloromethyl)oxirane, acetate	134240-13-4
4,4'-Methylenebis benzeneamine, polymer with (2-methylphenoxy) methyl oxirane and [4,4'-(1-methylethylidene) bisphenol polymer with (chloromethyl) oxirane]	138009-66-2
Reaction product of 1,3-propanediamine, N'-(3-aminopropyl)- N,N-dimethyl and phenol,4,4'-(1-methylethylidene)bis, polymer with (chloro) methyloxirane	169797-09-5

Chemical Name in the Inventory	CAS Number
Benzoic acid, 2-hydroxy-, reaction products with 5-amino-1,3,3-trimethylcyclohexanemethanamine and bisphenol A-epichlorohydrin polymer	185630-98-2
C18-unsatd., dimers, polymers with acetic acid, bisphenol A, epichlorohydrin, ethylenediamine and malonic acid	375843-74-6
4,4'-isopropylidenediphenol, polymer with 1-chloro-2, 3-epoxypropane, 2,2'-thiobis(ethanol) and 3-hydroxy-2-(hydroxymethyl)-2-methyl-propionic acid	218612-30-7
Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane, 2-(methylamino)ethanol and alpha,alpha'-[(1-methylethylidene)di-4,1-phenylene]bis[omega-hydroxypoly(oxy-1,2-ethanediyl)]	72017-95-9
2(3H)-Furanone, 5-ethyldihydro-, polymer with (chloromethyl)oxirane, 4,4’-(1-methylethylidene)bis[phenol], 4-(1-methyl-1-phenylethyl)phenol and 1-octadecanamine	439600-87-0
Fatty acids, C18-unsatd., dimers, reaction products with bisphenol A epichlorohydrin copolymer, tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine	157707-80-7

Preface

This assessment was carried out by staff of the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) using the Inventory Multi-tiered Assessment and Prioritisation (IMAP) framework.

The IMAP framework addresses the human health and environmental impacts of previously unassessed industrial chemicals listed on the Australian Inventory of Chemical Substances (the Inventory).

The framework was developed with significant input from stakeholders and provides a more rapid, flexible and transparent approach for the assessment of chemicals listed on the Inventory.

Stage One of the implementation of this framework, which lasted four years from 1 July 2012, examined 3000 chemicals meeting characteristics identified by stakeholders as needing priority assessment. This included chemicals for which NICNAS already held exposure information, chemicals identified as a concern or for which regulatory action had been taken overseas, and chemicals detected in international studies analysing chemicals present in babies’ umbilical cord blood.

Stage Two of IMAP began in July 2016. We are continuing to assess chemicals on the Inventory, including chemicals identified as a concern for which action has been taken overseas and chemicals that can be rapidly identified and assessed by using Stage One information. We are also continuing to publish information for chemicals on the Inventory that pose a low risk to human health or the environment or both. This work provides efficiencies and enables us to identify higher risk chemicals requiring assessment.

The IMAP framework is a science and risk-based model designed to align the assessment effort with the human health and environmental impacts of chemicals. It has three tiers of assessment, with the assessment effort increasing with each tier. The Tier I assessment is a high throughput approach using tabulated electronic data. The Tier II assessment is an evaluation of risk on a substance-by-substance or chemical category-by-category basis. Tier III assessments are conducted to address specific concerns that could not be resolved during the Tier II assessment.

These assessments are carried out by staff employed by the Australian Government Department of Health and the Australian Government Department of the Environment and Energy. The human health and environment risk assessments are conducted and published separately, using information available at the time, and may be undertaken at different tiers.

This chemical or group of chemicals are being assessed at Tier II because the Tier I assessment indicated that it needed further investigation.

For more detail on this program please visit:**www.nicnas.gov.au**

Disclaimer

ACRONYMS & ABBREVIATIONS

Grouping Rationale

The chemicals in this group are polymers that contain bisphenol A (BPA) (CAS No. 80-05-7) as a monomer within a epoxy resin polymer. These are often co-reacted with polyfunctional amines, acids (and acid anhydrides), phenols, alcohols and thiols to produce hardened and highly crosslinked plastic and hence, these are also included in the assessment.

The polymers in this group are generally of low concern to the human health. However, the products manufactured using these chemicals may contain BPA (from incomplete polymerisation) or may release BPA (as a result of hydrolysis from the polymers) under certain conditions. The hazardous properties of the polymers is expected to be mostly driven by the toxicity profile of BPA.

Bisphenol A is an industrial chemical that has been widely used as a monomer in the manufacturing of certain polycarbonate plastics and epoxy resins which are widely used in consumer products. The epoxy resin polymers containing BPA are the focus of this assessment. The polymers are often used as a lining in food and beverage cans and vats. They are also widely used across a wide range of construction and industrial uses.

There is an array of different types of polymers that can be produced using BPA such as the polycarbonates, nonylphenols, formaldehyde or amines. Differences in scenarios for release of BPA apply across the range of polymers. Such polymers are not included in this assessment as they may have different risks, both qualitatively and quantitatively, to human health.

Import, Manufacture and Use

Australian

The polymer, phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (CAS No 25036-25-3) has reported domestic use as an adhesive.

No specific Australian use, import, or manufacturing information has been identified for the other chemicals in this group.

International

The following international uses have been identified through Galleria Chemica and the Substances in Preparations in Nordic Countries (SPIN) database.

Some polymers in this group have reported cosmetic uses including as film forming and binding agents.

Some polymers in this group have reported domestic uses including in paints, lacquers and varnishes, surface treatment, cleaning/washing agents, adhesives, binding agents, corrosion inhibitors and fillers.

Some polymers in this group have reported commercial uses including in reprographic agents, viscosity adjustors, construction materials, process regulators, fuel additives, lubricants and additives, and solvents.

Some polymers in this group have reported site-limited uses including as intermediates and in plastics manufacture.

Some polymers in this group have reported non-industrial uses as non−agricultural pesticides, preservatives and food/feedstuff flavourings and nutrients.

Restrictions

Australian

No known restrictions have been identified for the chemicals in this group or BPA itself (SUSMP, 2019).

International

No known restrictions have been identified.

Existing Worker Health and Safety Controls

Hazard Classification

The chemicals in the group are not listed on the Hazardous Chemical Information System (HCIS) (Safe Work Australia).

BPA is classified as hazardous with the following risk phrases for human health in the HCIS as:

Causes serious eye damage - Cat. 1 (H318);

May cause respiratory irritation - Specific target organ tox, single exp Cat. 3 (H335);

May cause an allergic skin reaction - Cat. 1 (H317); and

Suspected of damaging fertility - Cat. 2 (H361f)

Exposure Standards

Australian

There are no specific exposure standards available for individual polymers in this group or BPA itself.

International

There are no specific exposure standards available for individual polymers in this group.

The following exposure standards are identified for BPA (Galleria Chemica):

Bisphenol A (CAS No. 80-05-7) has an exposure limit of 5–10 mg/m^3 time weighted average (TWA) in countries such as France, Germany, Ireland, the Netherlands, Norway, Poland, Russia, Spain, and the United Kingdom.

Bisphenol A (CAS No. 80-05-7) also has an exposure limit of 5–10 mg/m^3 short-term exposure limit (STEL) in countries such as Russia and Switzerland.

Health Hazard Information

Epoxy resin polymers containing BPA are the focus of this assessment. There are no data available on the health hazards of the polymers in this group. The bioavailability of the polymers is expected to be negligible due to their large molecular size. However, it is considered that bisphenol A released from the decomposition of these polymers will generally be the critical driver of toxicity.

The critical health hazards of BPA have been previously identified in the Tier II Human Health assessment of bisphenol A under the Inventory Multi-tiered Assessment and Prioritisation (IMAP) Framework (NICNAS). Bisphenol A is a reproductive toxicant at high dose levels in animals. However, the evidence was not sufficient to infer a causal link between bisphenol A exposure and reproductive effects in humans at current exposure levels. Reproductive or developmental effects at low doses, below the human equivalent dose (HED) of 3.6 mg/kg bw/day, were not assigned overall as being 'likely' to have these effects (EFSA, 2015). Increase in kidney (nephropathy) and liver weight (hepatocellular hypertrophy) changes were observed at high doses in animals. A benchmark dose lower bound (BMDL)10 of 8.96 mg/kg bw/day for changes in relative kidney weight was determined from a two-generation reproductive study in mice. Bisphenol A is unlikely to have any neurological, neurodevelopmental, and or neuroendocrine effects. It is also not considered to have mutagenic, or genotoxic or carcinogenic potential. Although bisphenol A has produced proliferative (abnormal cell growth) changes in the mammary gland in animal studies, including a non-human primate study, these were insufficient to conclude a link to cancer development (NICNAS; EFSA, 2015).

Food Standards Australia New Zealand (FSANZ) has concluded that exposure to bisphenol A in food does not present a significant human health and safety issue at current exposure levels (FSANZ, 2010). FSANZ concurred with the previously performed hazard assessment by other regulatory agencies and also with the tolerable daily intake (TDI) of 50 µg/kg bw/ per day. A FSANZ survey of bisphenol A in food and drinks in the Australian market found only a limited number of products with detectable levels of bisphenol A; and no detectable levels of bisphenol A were found in infant formula. FSANZ concluded that Australians of all ages are exposed to extremely low levels (in the range of ng/kg food to µg/kg food) of bisphenol A via such packaged foodstuffs (FSANZ, 2010). Health Canada (2012) and the US Food and Drug Administration (US FDA, 2014) have drawn similar conclusions. The European Food Safety Authority (EFSA) concluded that bisphenol A poses no health risk to consumers of any age group (including unborn children, infants and adolescents) at the estimated levels of exposure. In addition to dietary exposure, the EFSA report also calculated 'average' and 'high' exposure levels for dust and toys, thermal paper, and cosmetics. Exposure (TDI) from the diet or from a combination of all sources (diet, dust, cosmetics and thermal paper) is considerably under the safe exposure level (EFSA, 2015).

The chemicals are not expected to readily release BPA as the reactions involved in formation of epoxy resins are not expected to be readily reversible. Where the polymers in this group do release BPA under extreme conditions, it is considered that the levels may not be of concern to either public or worker health and safety based on the above stated data.

Risk Characterisation

Critical Health Effects

These polymers are not expected to readily release BPA. The levels of BPA are expected to be well within concentration levels where systemic or local effects would not be observed. Therefore, no significant health effects are expected from presence of BPA in these polymers.

However, where the polymers in this group contain free epoxide groups, particularly if they are low molecular weight pre-polymers, irritancy may occur.

Public Risk Characterisation

The use(s) of these polymers are not well known. Use(s) in Australia have not been reported except for the polymer, phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] (CAS No 25036-25-3), which has domestic use as an adhesive. However, some have reported to be used in cosmetic and domestic products overseas. This group of polymers excludes the BPA-based polymers used in baby bottle (polycarbonates). Potential consumer uses might include use of the chemical in some food contact plastics and as linings in beverage cans and vats. Small amounts of bisphenol A can migrate into food and beverages from containers.

Food Standards Australia New Zealand (FSANZ) has concluded that exposure to bisphenol A in food does not present a significant human health and safety issue at current exposure levels (FSANZ, 2010). Health Canada (2012) and the US Food and Drug Administration (US FDA, 2014) have drawn similar conclusions. Exposure from the diet or from a combination of all sources (diet, dust, cosmetics and thermal paper) is estimated to be considerably under the suggested safe exposure level for BPA (EFSA, 2015).

Based on the above information, the risk to public health is not considered to be unreasonable and further risk management of the chemicals is not considered necessary for public safety.

Occupational Risk Characterisation

During product formulation, dermal, ocular and inhalation exposure of workers to the chemicals of this group may occur, particularly where manual or open processes are used. These may include transfer and blending activities, quality control analysis, and cleaning and maintenance of equipment. Worker exposure to the chemical at lower concentrations may also occur while using formulated products containing the chemical. The level and route of exposure will vary depending on the method of application and work practices employed.

Where the polymers in this group contain free epoxide groups, particularly if they are low molecular weight pre-polymers, given the potential for irritant effects, the chemicals may pose an unreasonable risk to workers unless adequate control measures to minimise dermal, ocular and inhalation exposure to the chemical are implemented. The chemicals should be appropriately classified and labelled to ensure that a person conducting a business or undertaking (PCBU), e.g. employer, at a workplace, has adequate information to determine appropriate controls. Companies using or marketing these polymers should have sufficient information to determine whether the polymer contains free epoxide groups.

Based on available data, the amount of BPA expected to be available from these chemicals is very low and; therefore, classification based on BPA is not recommended. Should empirical data become available for the individual polymers indicating that a classification is appropriate, the data may be used to make recommendation(s) for classification.

NICNAS Recommendation

Current risk management measures are considered adequate to protect public and workers' health and safety, provided that all requirements are met under workplace health and safety, and poisons legislation as adopted by the relevant state or territory. No further assessment is required.

Companies using or marketing these polymers should have sufficient information to determine whether the polymer contains free BPA or releases BPA, and take appropriate risk management measures to control the hazards associated with BPA.

Where the polymers in this group contain free epoxide groups, appropriate control measures should be implemented (see **Regulatory control: Work Health and Safety**).

Regulatory Control

Work Health and Safety

Based on the available data, the polymers in this group are not recommended for hazard classification in the Hazardous Chemical Information System (HCIS) (Safe Work Australia). Should data becomes available for the individual group members indicating that a classifcation is appropriate, the data may be used to make recomemndation for individual classifications.

Companies using or marketing polymers that are epoxide group terminated should have sufficient information to determine whether the polymer contains free epoxide groups. If the polymers do contain free epoxide groups, particularly if they are low molecular weight pre-polymers, irritancy may occur and appropriate classification and control measures should be implemented.

From 1 January 2017, under the model Work Health and Safety Regulations, chemicals are no longer to be classified under the Approved Criteria for Classifying Hazardous Substances system.

Advice for industry

Control measures

Control measures to minimise the risk from exposure to the chemicals should be implemented in accordance with the hierarchy of controls. Approaches to minimise risk include substitution, isolation and engineering controls. Measures required to eliminate, or minimise risk arising from storing, handling and using hazardous chemicals depend on the physical form and the manner in which the chemicals are used. Examples of control measures that could minimise the risk include, but are not limited to:

- minimising manual processes and work tasks through automating processes;
- work procedures that minimise splashes and spills;
- regularly cleaning equipment and work areas; and
- using protective equipment that is designed, constructed, and operated to ensure that the worker does not come into contact with the chemicals.

Guidance on managing risks from hazardous chemicals are provided in the *Managing risks of hazardous chemicals in the workplace—Code of practice* available on the Safe Work Australia website.

Personal protective equipment should not solely be relied upon to control risk and should only be used when all other reasonably practicable control measures do not eliminate or sufficiently minimise risk. Guidance in selecting personal protective equipment can be obtained from Australian, Australian/New Zealand or other approved standards.

Obligations under workplace health and safety legislation

Information in this report should be taken into account to help meet obligations under workplace health and safety legislation as adopted by the relevant state or territory. This includes, but is not limited to:

- ensuring that hazardous chemicals are correctly classified and labelled;
- ensuring that (material) safety data sheets ((M)SDS) containing accurate information about the hazards (relating to both health hazards and physicochemical (physical) hazards) of the chemicals are prepared; and
- managing risks arising from storing, handling and using a hazardous chemical.

Your work health and safety regulator should be contacted for information on the work health and safety laws in your jurisdiction.

Information on how to prepare an (M)SDS and how to label containers of hazardous chemicals are provided in relevant codes of practice such as the *Preparation of safety data sheets for hazardous chemicals—Code of practice* and *Labelling of workplace*

hazardous chemicals—Code of practice, respectively. These codes of practice are available from the Safe Work Australia website.

A review of the physical hazards of these chemicals has not been undertaken as part of this assessment.

References

European Food Safety Authority (EFSA) 2015. Scientific Opinion on the risks to public health related to the presence of bisphenol A (BPA) in foodstuffs: EFSA Journal 2015;13(1):3978. Accessed at **http://www.efsa.europa.eu/en/efsajournal/pub/3978.htm**

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The Poisons Standard February 2019. The Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) No. 23. Accessed February 2019 at **https://www.tga.gov.au/publication/poisons-standard-susmp**

U.S Food and Drug Administration (US FDA) (2014). Bisphenol A (BPA): Use in Food Contact Application. Accessed at **http://www.fda.gov/food/ingredientspackaginglabeling/foodadditivesingredients/ucm064437.htm#summary**

Last Update 28 June 2019

Chemical Identities

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 2-methyl-2-propenoate** Bisphenol A, epichlorohydrin polymer, methacrylate
CAS Number	61970-25-0
Structural Formula	

	
Molecular Formula	(C15H16O2.C3H5ClO)x.xC4H6O2
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, bis(2-methyl-2-propenoate)**
CAS Number	62395-94-2
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO)x.2C4H6O2
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, tall-oil, polymers with bisphenol A and epichlorohydrin** bisphenol A, (chloromethyl)oxirane, tall oil fatty acids polymer tall oil fatty acids, (chloromethyl)oxirane, 4,4-(1-methylethylidene)bisphenol polymer

	tall oil fatty acids, (chloromethyl)oxirane, bisphenol A polymer tall oil fatty acids, bisphenol A, epichlorohydrin polymer
CAS Number	66070-75-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO.Unspecified)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, soya, polymers with bisphenol A and epichlorohydrin** soya fatty acids, bisphenol A, epichlorohydrin polymer soybean fatty acids, bisphenol A, epichlorohydrin polymer soybean fatty oil acids, bisphenol A, epichlorohydrin polymer
CAS Number	66070-76-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, dehydrated castor oil, polymers with bisphenolA and epichlorohydrin** bisphenol A, epichlorohydrin, dehydrated castor oil fatty acids polymer castor oil fatty acids, dehydrated, bisphenol A, epichlorohydrin polymer castor oil fatty acids, dehydrated, bisphenol A,(chloromethyl)oxirane polymer dehydrated castor oil fatty acids, 4,4-isopropylidenediphenol, epichlorohydrin polymer dehydrated castor oil fatty acids, bisphenol A, (chloromethyl)oxirane polymer
CAS Number	66070-77-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and soya fatty acids** soybean oil fatty acids, dimer fatty acids, bisphenol A, epichlorohydrin polymers
CAS Number	66070-80-2
Structural Formula	**No Structural Diagram Available**

Molecular Formula	(C15H16O2.C3H5ClO..)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, dehydrated castor oil, polymers with adipic acid, bisphenol A, epichlorohydrin and trimellitic anhydride**
CAS Number	66071-05-4
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C9H4O5.C6H10O4.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with aniline, bisphenol A, cyclohexylamine and epichlorohydrin**
CAS Number	66071-09-8
Structural Formula	

	
Molecular Formula	(C15H16O2.C6H13N.C6H7N.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2-(chloromethyl)oxirane and 4,4'-methylenebis[benzenamine]** Phenol, 4,4-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 4,4-methylenebis[benzenamine]
CAS Number	40364-42-9
Structural Formula	
Molecular Formula	(C15H16O2.C13H14N2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]**

CAS Number	25036-25-3
Structural Formula	
Molecular Formula	(C21H24O4.C15H16O2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**1,2-Ethanediamine, polymer with 2,2'-[(1-methylethylidene) bis (4,1-phenyleneoxymethylene)] bis [oxirane]** adduct of 1,2 ethanediamine and the reaction products of epichlorohydrin and bis phenol A.
CAS Number	27615-34-5
Structural Formula	
Molecular Formula	(C21H24O4.C2H8N2) x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, ethenylbenzene and 4,4'-(1-methylethylidene)bis[phenol]** bisphenol A, epichlorohydrin, methacrylic acid, styrene resin
CAS Number	28262-39-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C8H8.C4H6O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (butoxymethyl)oxirane and (chloromethyl)oxirane** oxirane, (butoxymethyl)-, polymer with (chloromethyl)oxirane and 4,4-(1-methylethylidene)bis[phenol
CAS Number	29407-84-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C7H14O2.C3H5ClO)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane** diethylenetriamine, 4,4-(1-methylethylidene)bisphenol, (chloromethyl)oxirane polymer diethylenetriamine, bisphenol A, epichlorohydrin polymer epichlorohydrin, bisphenol A, diethylenetriamine terpolymer
CAS Number	31326-29-1
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C4H13N3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** epichlorohydrin, bisphenol A, methacrylic acid polymer
CAS Number	36425-15-7
Structural Formula	

	
Molecular Formula	(C15H16O2.C4H6O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, 2,5-furandione and 4,4'-(1-methylethylidene)bis[phenol]** 2-methyl-2-propenoic acid, polymer with (chloromethyl)oxirane, 2,5-furandione and 4,4-(1-methylethylidene)bis[phenol
CAS Number	36425-16-8
Structural Formula	
Molecular Formula	(C15H16O2.C4H6O2.C4H2O3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and methyloxirane**

CAS Number	36484-54-5
Structural Formula	
Molecular Formula	(C15H16O2.C3H6O.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 1,2-ethanediamine**
CAS Number	36704-31-1
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO.C2H8N2)x
Molecular Weight	Not specified

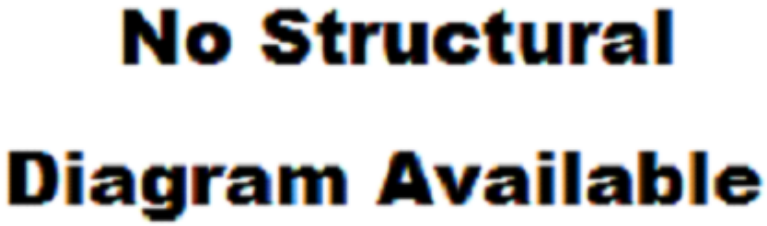
Chemical Name in the Inventory and Synonyms	**Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)** polyethylene glycol, diglycidyl bisphenol A polymer
CAS Number	37225-26-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.(C2H4O)nH2O)x
Molecular Weight	Not specified

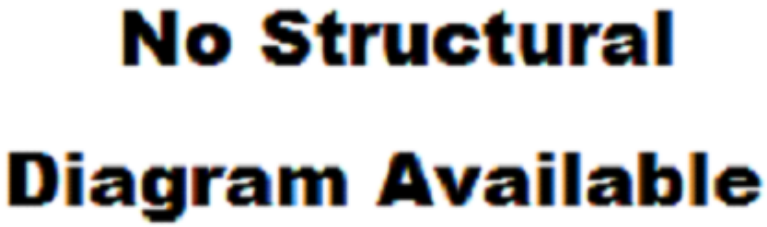
Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** bisphenol A, epichlorohydrin, acrylic acid polymer phenol, 4,4-(1-methyethylidene)bis-, polymer with (chloromethyl)oxirane, di-2-propenoate
CAS Number	37625-93-7
Structural Formula	**No Structural Diagram Available**

Molecular Formula	(C15H16O2.C3H5ClO.C3H4O2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N,N'-bis(2-aminoethyl)-1,2-ethanediamine and (chloromethyl)oxirane** bisphenol A, epichlorohydrin, triethylenetetramine polymer
CAS Number	38294-69-8
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C6H18N4.C3H5ClO)x
Molecular Weight	Not specified

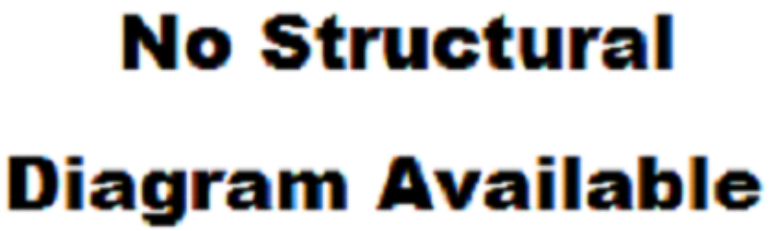
Chemical Name in the Inventory and Synonyms	**5-Isobenzofurancarboxylic acid, 1,3-dihydro-1,3-dioxo-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** trimellitic anhydride, bisphenol A, epichlorohydrin polymer
CAS Number	38415-60-0
Structural Formula	

	
Molecular Formula	(C15H16O2.C9H4O5.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol,4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl) oxirane .alpha.-hydro-, .omega.-hydroxypoly (oxy-1,2-ethanediyl)** Surfactant 23W004
CAS Number	42617-82-3
Structural Formula	
Molecular Formula	C15H16O2.C3H5ClO.(C2H4O)n H2O)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 2,2'-methylenebis[phenol]**

CAS Number	51856-58-7
Structural Formula	
Molecular Formula	(C15H16O2.C13H12O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, benzoate**
CAS Number	52907-82-1
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO)x.xC7H6O2
Molecular Weight	Not specified

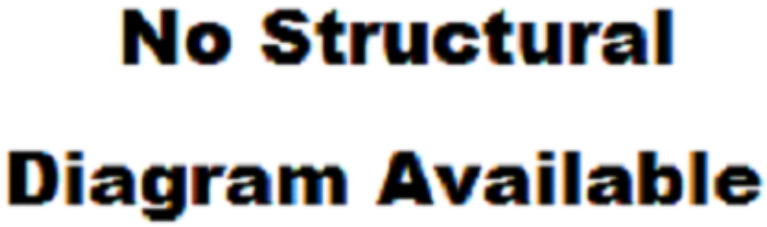
Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]**
CAS Number	52985-33-8
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C3H4O2)x
Molecular Weight	Not specified

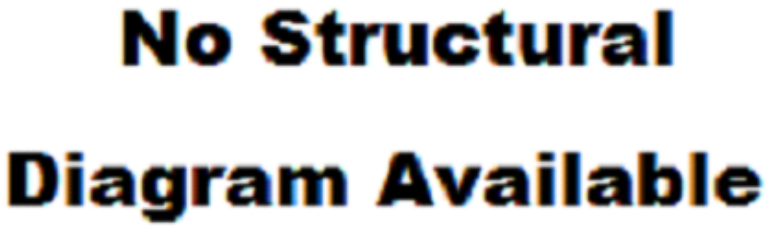
Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, di-2-propenoate** diglycidyl ether of bisphenol A, ester with acrylic acid (1:2)
CAS Number	53814-24-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO)x.2C3H4O2

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 2-propenoate**
CAS Number	55818-57-0
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO)x.xC3H4O2
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Butanedioic acid, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** succinic acid, bisphenol A, epichlorohydrin polymer
CAS Number	60815-61-4
Structural Formula	

	
Molecular Formula	(C15H16O2.C4H6O4.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 1,2-benzenedicarboxylate 2-propenoate**
CAS Number	61419-28-1
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO)x.xC8H6O4.xC3H4O2
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Guanidine, cyano polymer with phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with 2-methyl-1H-imidazole**

CAS Number	61584-94-9
Structural Formula	No Structural Diagram Available
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, ethenylbenzene, ethyl 2-propenoate and 4,4'-(1-methylethylidene)bis[phenol], compound with 2-(dimethylamino)ethanol**
CAS Number	68957-91-5
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C8H8.C5H8O2.C4H6O2.C3H5ClO)x.xC4H11NO
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, monoester with 1,2-propanediol, polymer with (chloromethyl)oxirane, dihydro-2,5-furandione and 4,4'-(1-methylethylidene)bis[phenol]** bisphenol A, epichlorohydrin, succinic anhydride, hydroxypropyl acrylate polymer
CAS Number	68958-77-0
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C6H10O3.C4H4O3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phosphoric acid, polymer with 4,4'-(1-methylethylidene)bis[phenol] and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]**
CAS Number	64346-82-3
Structural Formula	

	
Molecular Formula	(C21H24O4.C15H16O2.H3O4P)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Nonanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 4,4'-(1-methylethylidene)bis[phenol]** trimellitic anhydride, azelaic acid, bisphenol A, epichlorohydrin polymer
CAS Number	64365-56-6
Structural Formula	
Molecular Formula	(C15H16O2.C9H16O4.C9H4O5.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Octadecanoic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 4,4'-(1-methylethylidene)bis[phenol]**

	stearic acid, trimellitic anhydride, bisphenol A-epichlorohydrin polymer
CAS Number	64365-58-8
Structural Formula	No Structural Diagram Available
Molecular Formula	(C18H36O2.C15H16O2.C9H4O5.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, (Z,Z)-9,12-octadecadienoate (Z)-9-octadecenoate**
CAS Number	64521-30-8
Structural Formula	No Structural Diagram Available
Molecular Formula	C18H34O2.xC18H32O2.x(C15H16O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, ethenylbenzene, ethyl 2-propenoate and 4,4'-(1-methylethylidene)bis[phenol]** bisphenol A, epichlorohydrin, styrene, methacrylic acid, ethyl acrylate resin
CAS Number	65308-20-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C8H8.C5H8O2.C4H6O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, dehydrated castor oil, polymers with adipic acid, bisphenol A, epichlorohydrin and trimellitic anhydride, ammonium salts** ammonium hydroxide neutralized trimellitic anhydride, adipic acid, dehydrated castor oil fatty acids, bisphenol A, epichlorohydrin polymer
CAS Number	66071-59-8
Structural Formula	

	
Molecular Formula	(C15H16O2.C9H4O5.C6H10O4.C3H5ClO.H3N.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (butoxymethyl)oxirane and (chloromethyl)oxirane, 2-propenoate**
CAS Number	66085-58-3
Structural Formula	
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, benzenemethanol, neodecanoic acid, oxiranylmethyl ester and 1,3-benzenedimethanamine** Epicure 124

CAS Number	69234-68-0
Structural Formula	
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, polymer with (chloromethyl)oxirane, 1,6-hexanediyl di-2-propenoate and 4,4'-(1-methylethylidene)bis[phenol]** phenol, 4,4-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 1,6-hexanediyl di-2-propenoate and 2-propenoic acid
CAS Number	66664-15-1
Structural Formula	
Molecular Formula	(C15H16O2.C12H18O4.C3H5ClO.C3H4O2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, octadecanoate 2-propenoate**
CAS Number	66746-11-0
Structural Formula	**No Structural Diagram Available**
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and diaminodiphenyl sulfone** Epikote 210
CAS Number	67351-95-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	Unspecified

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Tall oil, polymer with bisphenol A, epichlorohydrin, glycerol and phthalic anhydride** tall oil, glycerin, phthalic anhydride, bisphenol A, epichlorohydrin resin
CAS Number	67745-98-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C8H4O3.C3H8O3.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, linseed oil, polymers with bisphenol A and epichlorohydrin** bisphenol A, (chloromethyl)oxirane polymer, linseed oil fatty acids ester linseed oil fatty acids, polymers with bisphenol A and epichlorohydrin
CAS Number	67746-09-2
Structural Formula	

	
Molecular Formula	(C15H16O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phosphoric acid, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** bisphenol A, (chloromethyl)oxirane, phosphoric acid polymer phosphoric acid, polymer with (chloromethyl)oxirane and 4,4-(1-methylethylidene)bis[phenol phosphoric acid, polymer with bisphenol A-epichlorohydrin resin
CAS Number	67846-40-6
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO.H3O4P)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Hexadecanoic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid and 4,4'-(1-methylethylidene)bis[phenol]**

	bisphenol A, epichlorohydrin, palmitic acid, trimellitic anhydride polymer
CAS Number	67906-75-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C16H32O2.C15H16O2.C9H4O5.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Benzoic acid, 4-amino-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** bisphenol A, epichlorohydrin, p-aminobenzoic acid polymer
CAS Number	67906-76-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C7H7NO2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4-(1,1-dimethylethyl)-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** a component of Araldite CY 208
CAS Number	67924-34-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C10H14O.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Hexanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 4,4'-(1-methylethylidene)bis[phenol] and octadecanoic acid** bisphenol A, epichlorohydrin, stearic acid, adipic acid, trimellitic anhydride polymer
CAS Number	67939-75-7
Structural Formula	**No Structural Diagram Available**

Molecular Formula	(C18H36O2.C15H16O2.C9H4O5.C6H10O4.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated dimers, polymers with bisphenol A and epichlorohydrin** bisphenol A, epichlorohydrin, dimer fatty acids polymer
CAS Number	67989-52-0
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with 2-methyl-1H-imidazole** bisphenol A, epichlorohydrin polymer, reaction products with 2-methylimidazole
CAS Number	68002-42-6
Structural Formula	

	
Molecular Formula	(C15H16O2.C4H6N2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**9,12-Octadecadienoic acid, (Z,Z)-, dimer, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** bisphenol A, epichlorohydrin, diethylenetriamine, linoleic acid dimer polymer
CAS Number	68003-11-2
Structural Formula	
Molecular Formula	((C18H32O2)2.C15H16O2.C4H13N3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), ether with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol]**

	ethoxylated, propoxylated glycerine, ether with [4,4-isopropylidenebisphenol, epichlorohydrin polymer
CAS Number	68036-92-0
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C3H5ClO)x.xC3H8O3.x(C3H6O.C2H4O)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Oxirane, methyl-, polymer with oxirane, ether with (chloromethyl)oxirane polymer with 4,4'-(1-methylethylidene)bis[phenol]** 4,4-isopropylidenebisphenol, epichlorohydrin polymer, poly(ethylene, propylene)glycol ether
CAS Number	68036-95-3
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C3H5ClO)x.x(C3H6O.C2H4O)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, dodecanoate 2-propenoate**
CAS Number	68071-07-8
Structural Formula	**No Structural Diagram Available**
Molecular Formula	Unspecified
Molecular Weight	Not specified

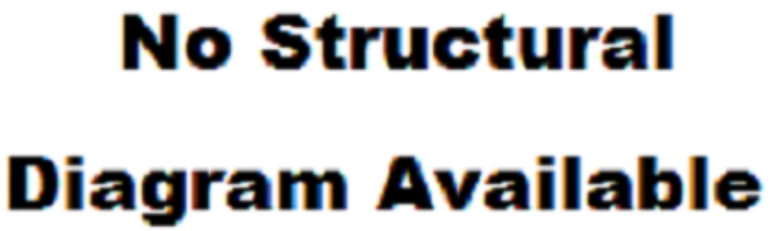
Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with diisopropanolamine**
CAS Number	68071-32-9
Structural Formula	

	
Molecular Formula	(C15H16O2.C6H15NO2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Tall oil, polymer with bisphenol A and epichlorohydrin** bisphenol A, epichlorohydrin, tall oil polymer tall oil, epichlorohydrin, bisphenol A resin
CAS Number	68092-35-3
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, methyloxirane and oxirane**

CAS Number	68123-18-2
Structural Formula	
Molecular Formula	(C15H16O2.C3H6O.C3H5ClO.C2H4O)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, polymer with fatty acids, C18-unsaturated, dimers**
CAS Number	68130-80-3
Structural Formula	
Molecular Formula	
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Oxepanone, polymer with (chloromethyl)oxirane, N-(1,3-dimethylbutylidene)-N'-[2-[(1,3-dimethylbutylidene)amino]ethyl]-1,2-ethanediamine, 2-(methylamino)ethanol, 4,4'-(1-methylethylidene)bis[phenol] and 2,2'-oxybis[ethanol], acetate (salt)**
CAS Number	68134-56-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C16H33N3.C15H16O2.C6H10O2.C4H10O3.C3H9NO.C3H5ClO)x.xC2H4O2
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, ethyloxirane and oxirane**
CAS Number	68140-38-5
Structural Formula	**No Structural Diagram Available**

Molecular Formula	(C15H16O2.C4H8O.C3H5ClO.C2H4O)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[2,6-dibromophenol] and 4,4'-(1-methylethylidene)bis[phenol]**
CAS Number	68140-84-1
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C15H12Br4O2.C4H6O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Cellulose, acetate butanoate, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], triethoxyphenylsilane and 3-(triethoxysilyl)-1-propanamine** phenol, 4,4-(1-methylethylidene)bis-, polymer with chloromethyloxirane, triethoxyphenylsilane, 3-(triethoxysilyl)propylamine and cellulose acetate butanoate
CAS Number	68310-22-5
Structural Formula	

	
Molecular Formula	(C15H16O2.C12H20O3Si.C9H23NO3Si.C4H8O2.C3H5ClO.xC2H4O2.x)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (butoxymethyl)oxirane and (chloromethyl)oxirane**
CAS Number	68318-41-2
Structural Formula	
Molecular Formula	(C15H16O2.C7H14O2.C4H13N3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)] and (chloromethyl)oxirane**

CAS Number	68318-44-5
Structural Formula	
Molecular Formula	(C15H16O2.(C3H6O)nC6H16N2O.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 1-piperazineethanamine**
CAS Number	68391-18-4
Structural Formula	
Molecular Formula	(C15H16O2.C6H15N3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2,5-Furandione, 3-(dodecenyl)dihydro-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]**
CAS Number	68399-66-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C16H26O3.C15H16O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, dehydrated castor oil, polymers with bisphenolA, epichlorohydrin and vegetable oil fatty acids** dehydrated castor fatty acid, vegetable fatty acid, bisphenol A, epichlorohydrin polymer
CAS Number	68410-25-3
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO..)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**1,2-Ethanediamine, N-(2-aminoethyl)-, reaction products with bisphenol A diglycidyl ether homopolymer**
CAS Number	68411-71-2
Structural Formula	**No Structural Diagram Available**
Molecular Formula	C21H24O4.C4H13N3
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with triethylenetetramine, reaction products with poly[bisphenol A diglycidyl ether]**
CAS Number	68424-41-9
Structural Formula	

	No Structural Diagram Available
Molecular Formula	(C21H24O4.C6H18N4.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenenitrile, polymer with 1,3-butadiene, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]**
CAS Number	68460-13-9
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C4H6.C3H5ClO.C3H3N)x
Molecular Weight	Not specified

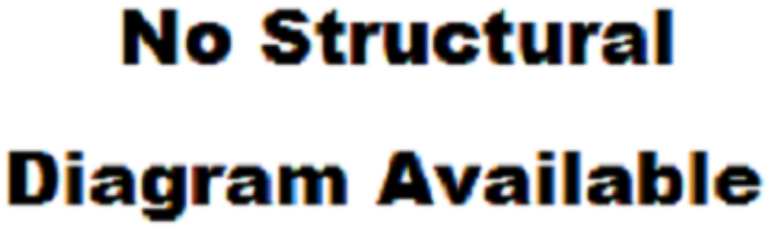
Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol] and 2-propenenitrile** 2-methyl-2-propenoic acid, polymer with 1,3-butadiene,

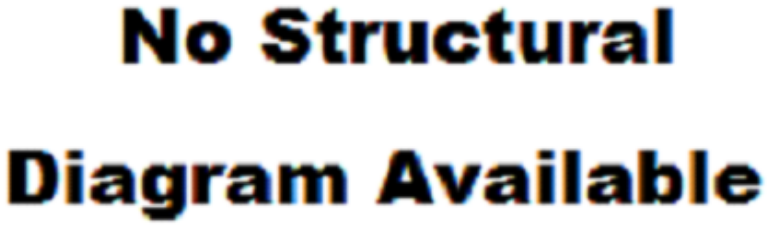
	(chloromethyl)oxirane, 4,4-(1-methylethylidene)bis[phenol] and 2-propenenitrile
CAS Number	68492-68-2
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C4H6O2.C4H6.C3H5ClO.C3H3N)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Castor oil, dehydrated, polymer with bisphenol A and epichlorohydrin** dehydrated castor oil, polymer with (chloromethyl)oxirane and 4,4-(1-methylethylidene)bis[phenol
CAS Number	68515-14-0
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**1,2-Cyclohexanediamine, reaction products with 1,6-hexanediamine and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane] homopolymer**
CAS Number	68609-07-4
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C6H16N2.C6H14N2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with (Z)-N-9-octadecenyl-1,3-propanediamine**
CAS Number	68610-10-6
Structural Formula	

	
Molecular Formula	(C21H44N2.C15H16O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenenitrile, polymer with 1,3-butadiene, carboxy terminated, polymers with bisphenol A and epichlorohydrin** chloromethyloxirane, polymer with 4,4-(1-methylethylidene)bis[phenol
CAS Number	68610-41-3
Structural Formula	
Molecular Formula	(C15H16O2.C4H6.C3H5ClO.C3H3N)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and phenyloxirane, reaction products with 4,4'-methylenebis[benzenamine]**

CAS Number	68610-55-9
Structural Formula	
Molecular Formula	(C15H16O2.C13H14N2.C8H8O.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, diethylenetriamine terminated**
CAS Number	68610-56-0
Structural Formula	
Molecular Formula	(C15H16O2.C4H13N3.C3H5ClO)x
Molecular Weight	Not specified

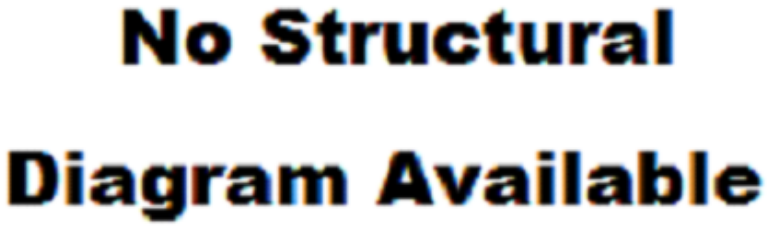
Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with phenol and 2,4,4-trimethyl-1,6-hexanediamine**
CAS Number	68610-57-1
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C9H22N2.C6H6O.C3H5ClO)x
Molecular Weight	Not specified

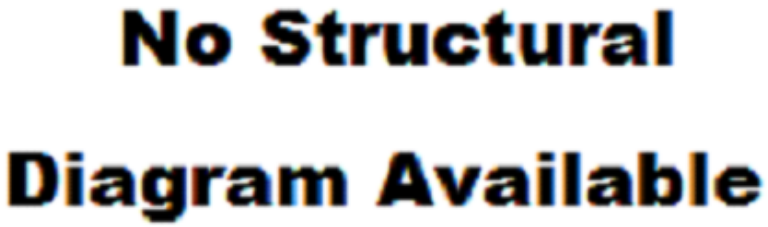
Chemical Name in the Inventory and Synonyms	**Fatty acids, dehydrated castor oil, polymers with bisphenolA, epichlorohydrin and styrene** bisphenol A, (chloromethyl)oxirane, dehydrated castor oil fatty acids, styrene polymer
CAS Number	68647-99-4
Structural Formula	**No Structural Diagram Available**

Molecular Formula	(C15H16O2.C8H8.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenenitrile, polymer with 1,3-butadiene, carboxy terminated, polymer with bisphenol A diglycidyl ether** carboxyl, modified butadiene, acrylonitrile copolymer, bisphenol A diglycidyl ether adduct
CAS Number	68648-83-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C4H6.C3H3N)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene) bis-, polymer with (chloromethyl) oxirane, reaction products with phenol** Beckopox EM 460
CAS Number	68649-35-4
Structural Formula	

	
Molecular Formula	C9H11O2(C18H20O3)C6H5O
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, polymer with 1,3-butadiene and 2-propenenitrile, reaction products with (bisphenol A, epichlorohydrinpolymer) and (3-carboxy-1-cyano-1-methylpropyl-terminated acrylonitrile, butadiene polymer)**
CAS Number	68649-62-7
Structural Formula	
Molecular Formula	(C15H16O2.C4H6.C3H5ClO.C3H4O2.C3H3N)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, polymer with 1,3-butadiene and 2-propenenitrile, reaction products with (bisphenol A, epichlorohydrinpolymer) and (3-**

	carboxy-1-cyano-1-methylpropyl, terminated polybutadiene)
CAS Number	68649-63-8
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C4H6.C3H5ClO.C3H4O2.C3H3N)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and .alpha.,.alpha.',.alpha.''-1,2,3-propanetriyltris[.omega.-hydroxypoly[oxy(methyl-1,2-ethanediyl)]]** polypropylene glycol, glycerol triether, epichlorohydrin, bisphenol A polymer
CAS Number	68683-13-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.(C3H6O)n(C3H6O)n(C3H6O)nC3H8O3.C3H5ClO)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, N,N-diethyl-1,3-propanediamine and 1-piperazineethanamine**
CAS Number	68698-70-4
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C7H18N2.C6H15N3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, polymer with 2,2,4-trimethyl-1,6-hexanediamine**
CAS Number	68845-20-5
Structural Formula	

	No Structural Diagram Available
Molecular Formula	(C21H24O4.C9H22N2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Hexanedioic acid, polymer with acetic acid, (chloromethyl)oxirane, N-(1,3-dimethylbutylidene)-N'-[2-[(1,3-dimethylbutylidene)amino]ethyl]-1,2-ethanediamine, 2,2-dimethyl-1,3-propanediol, 2-(methylamino)ethanol, 4,4'-(1-methylethylidene)bis[phenol] and 2,2'-oxybis[ethanol]**
CAS Number	105106-48-7
Structural Formula	No Structural Diagram Available
Molecular Formula	(C16H33N3.C15H16O2.C6H10O4.C5H12O2.C4H10O3.C3H9NO.C3H5ClO)x.C2H4O2
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C16 and C18-unsaturated, polymers with bisphenol A, butoxymethyloxirane, epichlorohydrin and triethylenetetramine**
CAS Number	105839-18-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C7H14O2.C6H18N4.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and ethylenediamine**
CAS Number	105839-24-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO.C2H8N2.)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and triethlenetetramine**
CAS Number	105839-25-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C6H18N4.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**9,12-Octadecadienoic acid, (Z,Z)-, dimer, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol], reaction products with 2,4,6-tris[2-(dimethylamino)ethyl]phenol, acetate (salt)**
CAS Number	68891-68-9
Structural Formula	

	No Structural Diagram Available
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4',-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with diethylenetriamine and 4-methyl-2-pentanone** reaction product of bisphenol A and epichorhydrin, polymer with diethylenetriamine and methylisobutylketone Setalux K 7002 BX-55
CAS Number	68910-26-9
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C6H12O.C4H13N3.C3H5ClO) x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**9,12-Octadecadienoic acid, (Z,Z)-, polymer with (chloromethyl)oxirane, ethenylbenzene, 4,4'-(1-methylethylidene)bis[phenol] and 2-methyl-2-**

	propenoic acid styrene, methacrylic acid, bisphenol A, linoleic fatty acid, epichlorohydrin polymer
CAS Number	68928-91-6
Structural Formula	No Structural Diagram Available
Molecular Formula	(C18H32O2.C15H16O2.C8H8.C4H6O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, C18-unsaturated fatty acid trimers and epichlorohydrin** bisphenol A, epichlorohydrin, C18 dimer fatty acid, C18 trimer fatty acids polymer
CAS Number	68991-71-9
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C3H5ClO.)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**1-Piperazineethanamine, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]**
CAS Number	70776-37-3
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C6H15N3)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Nonanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1, 3-dioxo-5-isobenzofurancarboxylic acid, 4,4'-(1-methylethylidene)bis[phenol] and (phenoxymethyl)oxirane**
CAS Number	70776-48-6
Structural Formula	

	
Molecular Formula	(C15H16O2.C9H16O4.C9H10O2.C9H4O5.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Nonanedioic acid, polymer with (chloromethyl)oxirane, 1,3-dihydro-1,3-dioxo-5-isobenzofurancarboxylic acid, 4,4'-(1-methylethylidene)bis[phenol] and (phenoxymethyl)oxirane, compound with 2-(dimethylamino)ethanol**
CAS Number	70776-49-7
Structural Formula	
Molecular Formula	(C15H16O2.C9H16O4.C9H10O2.C9H4O5.C3H5ClO)x.xC4H11NO
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate, (chloromethyl) oxirane, ethenylbenzene, 4,4'-(1-**

	methylethylidene)bis(phenol), methyl 2-methyl-2-propenoate and 2-propenoic acid Synthalat A 200 zanthalat A200
CAS Number	83770-98-3
Structural Formula	**No Structural Diagram Available**
Molecular Formula	C15H16O2.C8H8.C7H12O2.C6H10O3
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Hexanedioic acid, polymer with (chloromethyl)oxirane, 2,2-dimethyl-1,3-propanediol and 4,4'-(1-methylethylidene)bis[phenol]**
CAS Number	70468-11-0
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C6H10O4.C5H12O2.C3H5ClO)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Benzoic acid, 2-hydroxy-, reaction products with benzyl alcohol and polymer of bisphenol A-1,2-cyclohexanediamine and epichlorohydrin**
CAS Number	71608-42-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	C15H16O2.C7H8O.C7H6O3.C6H14N2.C3H5ClO
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 4,4'-sulfonylbis[benzenamine]**
CAS Number	71745-12-5
Structural Formula	

	
Molecular Formula	(C15H16O2.C12H12N2O2S.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenenitrile, polymer with 1,3-butadiene, carboxy terminated, polymer with bisphenol A diglycidyl ether homopolymer** carboxy terminated acrylonitrile, butadiene rubber, bisphenol A diglycidyl ether polymer
CAS Number	72245-33-1
Structural Formula	
Molecular Formula	(C21H24O4.C4H6.C3H3N)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 5-amino-1,3,3-trimethylcyclohexanemethanamine, (butoxymethyl)oxirane and (chloromethyl)oxirane**

CAS Number	72361-56-9
Structural Formula	
Molecular Formula	(C15H16O2.C10H22N2.C7H14O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with ethylenediamine** Epichlorohydrin, bisphenol A polymer, ethylenediamine adduct
CAS Number	72480-18-3
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO.C2H8N2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**1,6-Hexanediamine, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], acetate (ester)** hexamethylenediamine, bisphenol A diglycidylether polymer, acetate
CAS Number	73018-28-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Decanedioic acid, polymer with (chloromethyl)oxirane, 2,2-dimethyl-1,3-propanediol and 4,4'-(1-methylethylidene)bis[phenol]**
CAS Number	78705-33-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C10H18O4.C5H12O2.C3H5ClO)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Octadecanoic acid, hydroxy-, polymer with (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]** hydroxystearic acid, polymer with bisphenol A and epichlorhydrin
CAS Number	79771-14-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C18H36O3.C15H16O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, hexanedioate 2-propenoate** diglycidyl ether of bisphenol A, reaction products with acrylic acid and adipic acid
CAS Number	82600-83-7
Structural Formula	

	No Structural Diagram Available
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]**
CAS Number	82783-88-8
Structural Formula	No Structural Diagram Available
Molecular Formula	(C21H24O4.C15H16O2.C4H13N3)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Hexanedioic acid, polymer with (E)-2-butenedioic acid, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], .alpha.,.alpha.'-[(1-methylethylidene)di-4,1-phenylene]bis[.omega.-**

	hydroxypoly[oxy(methyl-1,2-ethanediyl)]], methyloxirane and oxirane
CAS Number	99328-61-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C6H10O4.C4H4O4. (C3H6O)n(C3H6O)nC15H16O2.C3H6O.C2H4O)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine, N,N'-bis(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane and 1,2-ethanediamine**
CAS Number	102958-51-0
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C6H18N4.C4H13N3.C3H5ClO.C2H8N2)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, dehydrated castor oil, reaction products with bisphenol A, epichlorohydrin polymer and soya fatty acids**
CAS Number	103069-83-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO..)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, linseed oil, reaction products with bisphenol A, epichlorohydrin polymer, maleic anhydride and soya fatty acids**
CAS Number	103069-88-1
Structural Formula	

	
Molecular Formula	(C15H16O2.C4H2O3.C3H5ClO..)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, soya, polymers with allyl alcohol, bisphenol A, epichlorohydrin, glycerol, phthalic anhydride and styrene**
CAS Number	103069-92-7
Structural Formula	
Molecular Formula	(C15H16O2.C8H8.C8H4O3.C3H8O3.C3H6O.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, soya, reaction products with allyl alcohol styrene polymer, bisphenol A epichlorohydrin polymer and phthalic anhydride**

CAS Number	103069-93-8
Structural Formula	
Molecular Formula	(C15H16O2.C8H8.C8H4O3.C3H6O.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, trimers, reaction products with bisphenol A, epichlorohydrin polymer and tallow alkyl amines, polymers with acrylonitrile**
CAS Number	103331-96-0
Structural Formula	
Molecular Formula	(C15H16O2.C3H5ClO.C3H3N..)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Neodecanoic acid, oxiranylmethyl ester, polymer with 1,3-benzenedimethanamine and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]**
CAS Number	103777-71-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C13H24O3.C8H12N2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Castor oil, dehydrated, polymer with (choromethyl)oxirane, 4,4''(1-methylethylidene)bis[phenol] and rosin** castor oil, dehydrated, polymer with epichlorhydrin, bis[phenol A] and rosin
CAS Number	106232-88-6
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO..)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Neodecanoic acid, oxiranylmethyl ester, polymer with 4,4'-methylenebis(benzenamine) and 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane]**
CAS Number	111411-01-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C13H24O3.C13H14N2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 2,2'-methylenebis-, polymer with 1,3-benzenedimethanamine, (chloromethyl)oxirane and 4,4'-(1-methylethylidene)bis[phenol]**
CAS Number	111439-77-1
Structural Formula	

	
Molecular Formula	(C15H16O2.C13H12O2.C8H12N2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane and 1,2-cyclohexanediamine, graft**
CAS Number	111439-78-2
Structural Formula	
Molecular Formula	(C15H16O2.C6H14N2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymers with 5-amino-1,3,3-trimethylcyclohexanemethanamine, 2,2-dimethyl-1,3-propanediamine, epichlorohydrin, epichlorohydrin-polyethylene glycol reaction products and polypropylene glycol mono-Me ether ether with**

	trimethylolpropane (3:1)
CAS Number	111470-96-3
Structural Formula	**No Structural Diagram Available**
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenenitrile, reaction products with 1,3-benzenedimethanamine polymers with bisphenol A diglycidyl ether**
CAS Number	111497-84-8
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C8H12N2.C3H3N)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Propanenitrile, 3-[(6-aminotrimethylhexyl)amino]-, polymers with 5-amino-1,3,3-trimethylcyclohexanemethanamine, bisphenol A, epichlorohydrin, epichlorohydrin-polyethylene glycol reaction products, polypropylene glycol diamine and 2,2,4(or 2,4,4)-trimethyl-1,6-hexanediamine**
CAS Number	111497-85-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C12H25N3.C10H22N2.C9H22N2.(C3H6O)nC6H16N2O.C3H5ClO.(C2H4O)nH2O)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with 2,2,4(or 2,4,4)-trimethyl-1,6-hexanediamine** reaction product of 4,4-(1-methylethylidene)bisphenol, polymer with chloromethyloxirane and trimethyl-hexamethylenediamine isomers
CAS Number	111850-23-8
Structural Formula	

	No Structural Diagram Available
Molecular Formula	(C15H16O2.C9H22N2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Castor oil, polymer with bisphenol A, diethylenetriamine, epichlorohydrin, 1-piperazineethanamine and triethylenetetramine**
CAS Number	111905-58-9
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C6H18N4.C6H15N3.C4H13N3.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C16 and C18-unsaturated, polymers with acrylonitrile-1,4-butanediol reaction products, bisphenol A, C18-unsaturated fatty acid dimers, epichlorohydrin and ethylenediamine**

CAS Number	111905-62-5
Structural Formula	
Molecular Formula	(C15H16O2.C4H10O2.C3H5ClO.C3H3N.C2H8N2..)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with acrylonitrile-1,4-butanediol reaction products, bisphenol A, epichlorohydrin and ethylenediamine**
CAS Number	111905-65-8
Structural Formula	
Molecular Formula	(C15H16O2.C4H10O2.C3H5ClO.C3H3N.C2H8N2.)x
Molecular Weight	Not specified

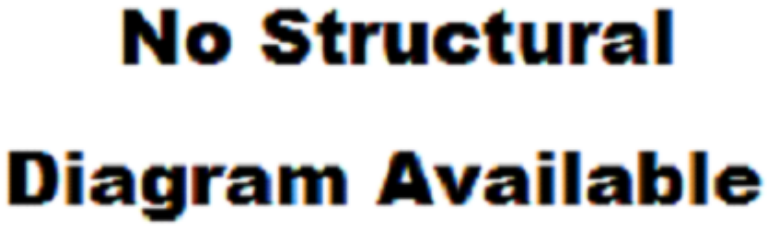
Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, C18-unsaturated fatty acid trimers, epichlorohydrin and triethylenetetramine** fatty acids, C18-unsaturated, trimers, polymers with bisphenol A, C18-unsaturated fatty acid dimers, epichlorohydrin and triethylenetetramine
CAS Number	111905-66-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C6H18N4.C3H5ClO.)x
Molecular Weight	Not specified

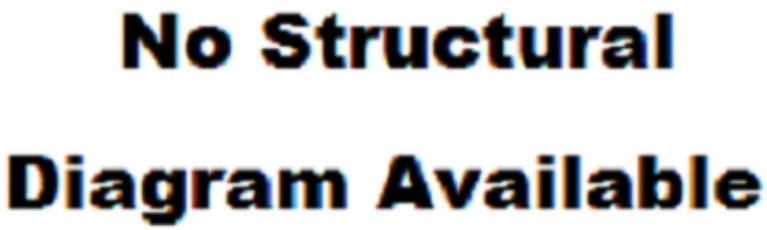
Chemical Name in the Inventory and Synonyms	**Fatty acids, coco, polymers with bisphenol A and epichlorohydrin**
CAS Number	113089-60-4
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO.)x

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, coco, polymers with bisphenol A, conjugated sunflower oil fatty acids, C18-unsaturated fatty acid dimers and epichlorohydrin** fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, coco fatty acids, conjugated sunflower oil fatty acids and epichlorohydrin
CAS Number	113089-61-5
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO...)x
Molecular Weight	Not specified

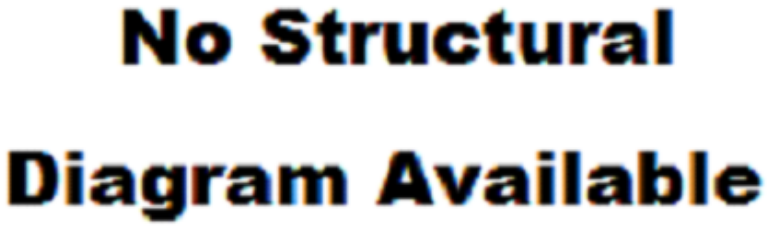
Chemical Name in the Inventory and Synonyms	**Reaction product of 1,3-benzenedimethanamine and 4,4'-(1-methylethylidene)bisphenol, polymer with (chloro)methyloxirane** Component of Wattyl Hardener MXV-8
CAS Number	113930-69-1
Structural Formula	

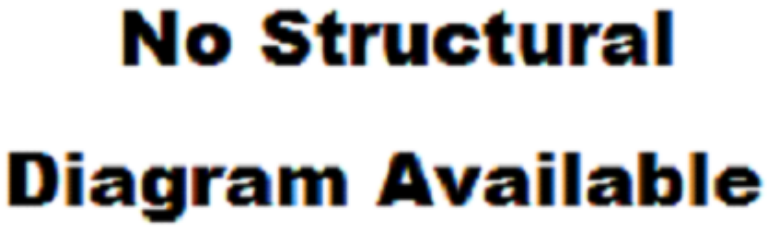
	
Molecular Formula	Not specified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**1,3-Benzenedicarboxylic acid, polymer with (chloromethyl)oxirane, 2,5-furandione, 4,4'-(1-methylethylidene)bis(phenol) and 1,2-propanediol, block** 1,2-propanediol, polymer with 1,3-benzenedicarboxylic acid, (chloromethyl)oxirane, 2,5-furandione and 4,4-(1-methylethylidene)bis(phenol), block 2,5-furandione, polymer with 1,3-benzenedicarboxylic acid, (chloromethyl)oxirane, 4,4-(1-methylethylidene)bis(phenol) and 1,2-propanediol, block oxirane, (chloromethyl)-, polymer with 1,3-benzenedicarboxylic acid, 2,5-furandione, 4,4-(1-methylethylidene)bis(phenol) and 1,2-propanediol, block
CAS Number	115047-96-6
Structural Formula	
Molecular Formula	(C15H16O2.C8H6O4.C4H2O3.C3H8O2.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**1,2-Ethanediol, polymer with (chloromethyl)oxirane, 2,5-furandione, 4,4'-(1-methylethylidene)bis(phenol) and 1,1'-((1-methylethylidene)bis(4,1-phenyleneoxy))bis(2-propanol) , block** 2,5-furandione, polymer with (chloromethyl)oxirane, 1,2-ethanediol, 4,4-(1-methylethylidene)bis(phenol) and 1,1-((1-methylethylidene)bis(4,1-phenyleneoxy))bis(2-propanol) , block 2-propanol, 1,1-((1-methylethylidene)bis(4,1-phenyleneoxy))bis-, polymer with (chloromethyl)oxirane, 1,2-ethanediol, 2,5-furandione and 4,4-(1-methylethylidene)bis(phenol), block phenol, 4,4-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, 1,2-ethanediol, 2,5-furandione and 1,1-((1-methylethylidene)bis(4,1-phenyleneoxy))bis(2-propanol) , block
CAS Number	115047-97-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H28O4.C15H16O2.C4H2O3.C3H5ClO.C2H6O2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene) bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis[oxirane], and 2,5-furandione and fatty acids, C16-18 and C18-unsaturated, graft**
CAS Number	116438-53-0
Structural Formula	

	
Molecular Formula	(C21H24O4.C15H16O2.C4H2O3.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene) bis-, polymer with (chloromethyl) oxirane, 2-(dimethylamino)ethanol and phosphoric acid**
CAS Number	116889-75-9
Structural Formula	
Molecular Formula	(C15H16O2.C4H11NO.C3H5ClO.H3O4P)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(3-aminopropyl)-1,3-propanediamine, (chloromethyl)oxirane and [[4-(1,1-dimethylethyl)phenoxy]methyl]oxirane, graft**

CAS Number	118685-36-2
Structural Formula	No Structural Diagram Available
Molecular Formula	(C15H16O2.C13H18O2.C6H17N3.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Hydrogenated C36 dimer fatty acid, polymer with fatty acids, C16-C18 and C18-unsaturated, bisphenol A diglycidyl ether,diethylenetriamine, N-methylolacrylamide, carbon dioxide, phenyl glycidyl ether and pentaethylene hexamine**
CAS Number	119298-91-8
Structural Formula	No Structural Diagram Available
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A and epichlorohydrin, graft**
CAS Number	119298-94-1
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, epichlorohydrin and 1,1'-methylenebis[4-isocyanatobenzene]**
CAS Number	119796-38-2
Structural Formula	**No Structural Diagram Available**

Molecular Formula	(C15H16O2.C15H10N2O2.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsaturated, dimers, polymers with bisphenol A, butyl glycidyl ether, epichlorohydrin and triethylenetetramine**
CAS Number	120034-78-8
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C7H14O2.C6H18N4.C3H5ClO.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)], (chloromethyl)oxirane and 1-piperazineethanamine**
CAS Number	124100-06-7
Structural Formula	

	
Molecular Formula	(C15H16O2.C6H15N3.(C3H6O)nC6H16N2O.C3H5ClO)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Linseed oil, heat polymerized, polymer with 3,6,9,12-tetraazatetradecane-1,14-diamine and 1,2-ethanediamine,N-(2-aminoethyl)-N'[2-[(2-aminoethyl)amino]ethyl]- and oxirane, 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bis-, homopolymer**
CAS Number	124128-87-6
Structural Formula	
Molecular Formula	(C21H24O4.C10H28N6.C8H23N5.)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, reaction products with reduced 1,1'-**

	[methylenebis(oxy)]bis[2-chloroethane], sodium sulfide (Na2S) polymer
CAS Number	124358-36-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15H16O2.C5H10Cl2O2.C3H5ClO.Na2S)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane, polymer with methyl 2-methyl-2-propenoate**
CAS Number	128093-67-4
Structural Formula	**No Structural Diagram Available**
Molecular Formula	

Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**C18-Unsaturated fatty acid dimers, polymer with tall oil fatty acids, bisphenol A diglycidyl ether, diethylene triamine, N-methylolacrylamide, phenyl glycidyl ether and polyethylenepolyamines**
CAS Number	128824-27-1
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C21H24O4.C9H10O2.C4H13N3.C4H7NO2...)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2-Propenoic acid, 2-methyl-, monoester with 1,2-propanediol, polymer with (chloromethyl)oxirane, ethenylbenzene, ethyl 2-propenoate, 4,4'-(1-methylethylidene)bis[phenol] and 2-propenoic acid**
CAS Number	132378-53-1
Structural Formula	

	
Molecular Formula	(C15H16O2.C8H8.C7H12O3.C5H8O2.C3H5ClO.C3H4O2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)poly[oxy(methyl-1,2-ethanediyl)] and (chloromethyl)oxirane, acetate**
CAS Number	134240-13-4
Structural Formula	
Molecular Formula	
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**4,4'-Methylenebis benzeneamine, polymer with (2-methylphenoxy) methyl oxirane and [4,4'-(1-methylethylidene) bisphenol polymer with (chloromethyl) oxirane]**

CAS Number	138009-66-2
Structural Formula	No Structural Diagram Available
Molecular Formula	Not specified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Reaction product of 1,3-propanediamine, N'-(3-aminopropyl)- N,N-dimethyl and phenol,4,4'-(1-methylethylidene)bis, polymer with (chloro) methyloxirane** component of Hardener HS67
CAS Number	169797-09-5
Structural Formula	No Structural Diagram Available
Molecular Formula	Not specified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Benzoic acid, 2-hydroxy-, reaction products with 5-amino-1,3,3-trimethylcyclohexanemethanamine and bisphenol A-epichlorohydrin polymer**
CAS Number	185630-98-2
Structural Formula	**No Structural Diagram Available**
Molecular Formula	Unspecified
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**C18-unsatd., dimers, polymers with acetic acid, bisphenol A, epichlorohydrin, ethylenediamine and malonic acid**
CAS Number	375843-74-6
Structural Formula	

	
Molecular Formula	
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**4,4'-isopropylidenediphenol, polymer with 1-chloro-2, 3-epoxypropane, 2,2'-thiobis(ethanol) and 3-hydroxy-2-(hydroxymethyl)-2-methyl-propionic acid**
CAS Number	218612-30-7
Structural Formula	
Molecular Formula	
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Phenol, 4,4'-(1-methylethylidene)bis-, polymer with N-(2-aminoethyl)-1,2-ethanediamine, (chloromethyl)oxirane, 2-(methylamino)ethanol and alpha,alpha'-[(1-methylethylidene)di-4,1-**

	phenylene]bis[omega-hydroxypoly(oxy-1,2-ethanediyl)] phenol, 4,4-(1-methylethylidene)bis-, polymer with (chloromethyl) oxirane and alpha,alpha-[(1-methylethylidene)-di-4,1-phenylene]bis[omega-hydroxypoly(oxy-1,2-ethandiyl)], reaction products with 2-(methylamino)ethanol, 1,2-ethanediamine, N-(2-aminoethyl)-. V3128/V3160 backbone polymer
CAS Number	72017-95-9
Structural Formula	**No Structural Diagram Available**
Molecular Formula	(C15 H16 O2 . C4 H13 N3 . C3 H9 N O . C3 H5 Cl O . (C2 H4 O)n (C2 H4 O)n C15 H16 O2)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**2(3H)-Furanone, 5-ethyldihydro-, polymer with (chloromethyl)oxirane, 4,4'-(1-methylethylidene)bis[phenol], 4-(1-methyl-1-phenylethyl)phenol and 1-octadecanamine**
CAS Number	439600-87-0
Structural Formula	**No Structural Diagram Available**

Molecular Formula	(C18H39N. C15H16O2. C15H16O. C6H10O2. C3H5Cl O)x
Molecular Weight	Not specified

Chemical Name in the Inventory and Synonyms	**Fatty acids, C18-unsatd., dimers, reaction products with bisphenol A epichlorohydrin copolymer, tall-oil fatty acids, tetraethylenepentamine and triethylenetetramine**
CAS Number	157707-80-7
Structural Formula	**No Structural Diagram Available**
Molecular Formula	unspecified
Molecular Weight	Not specified

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