Harmful Chemicals Used In Soap Making

2-bromo -2-nitropropane -1,3 diol
Preservative used in fabric softeners, detergents, pharmaceutical products, face creams, shampoo. Also known by its trade name Bronopol. Can release formaldehyde. Can irritate skin and eyes. Causes allergic contact dermatitis. Produces skin, eye and hair damage. Slightly less irritating than sodium lauryl sulfate.

Ammonium Lauryl Sulfate
Synthetic foaming agent, emulsifier and surfactant used shampoos, liquid soap substitutes, toothpaste, foaming facial cleansers, bubble bath. Also used in engine degreasers. Similar to sodium lauryl sulfate. Causes allergic contact dermatitis.

Butylated Hydroxyanisole
Preservative and antioxidant, used widely in cosmetics, also in cooking oils. Causes contact dermatitis and is a known skin and eye irritant. Banned in the UK as a food additive. Known skin irritant, may cause eye irritation and dermatitis. Unproven concerns over possible links to breast cancer. Can cause allergic reactions and contact dermatitis.

Butylated Hydroxytoluene
Preservative and antioxidant, similar uses to BHA. Causes allergic contact dermatitis.

Butylparaben
Preservative.

Cocamide DEA or MEA
Synthetic surfactant found in “natural” shampoos. Sometimes claimed to be “derived from coconut”. See also DEA. Can cause allergic reactions and contact dermatitis.

Cocamidopropyl Betaine
Synthetic surfactant found in “natural” shampoos, eye makeup remover and sometimes, soaps. Often used in conjunction with stronger surfactants such as sodium lauryl sulfate. Sometimes claimed to be “derived from coconut”. Can cause allergic reactions and contact dermatitis.

Coco-Betaine
Synthetic surfactant. Often found in “natural” shampoos. Emulsifying agent, solvent and detergent. Also used as dispersing agent and humectant. Found in soaps, moisturisers, shampoos, conditioners and other cosmetics. Also other products such as detergents, liquid handwash and pharmaceutical drugs. Preservative and antiseptic in cosmetics, usually in conjunction with parabens. Also used as a pesticide in the cotton industry. Known by its trade name Germall II. Can cause allergic skin rashes.

DEA (Diethanolamine)
Preservative, usually used in conjunction with other preservatives. Found in detergents, shampoos, conditioners and hand creams. A chelating agent used found in facial cleansers, soaps and baby lotions. Chelating agents bind metals in solutions to reduce cloudiness. DEA is a known skin and eye irritant, may be irritating to mucous membranes. May cause allergies such as asthma and skin rashes. Suspected carcinogen. Can cause skin irritations and contact dermatitis. Unproven concerns over possible links to breast cancer.

Diazolidinyl Urea
Preservative and antiseptic used in cosmetics, usually in conjunction with parabens. Also used as a pesticide in the cotton industry. Known by its trade name Germall II. Causes contact dermatitis. Releases formaldehyde. Causes dermatitis. Releases formaldehyde. Believed to affect nervous system and brain.

Dimethylol Hydantoin
Preservative, usually used in conjunction with other preservatives. Found in detergents, shampoos, conditioners and hand creams. Petrochemical based antibacterial and solvent used in hair colouring, hair care preparations, hand lotions and antiperspirants. Also known as isopropanol. Known skin irritant, damaging to the eyes. Extremely drying to the skin.

Ethylene Diamine Tetra Acid
Synthetic preservative used in cosmetics and soaps. Acutely toxic by inhalation, internal dose or topically. Skin, eye, nose and throat irritant, sensitizer, trigger for chemical sensitivity. Also known to cause asthma attacks, nausea and vomiting, skin rashes and headaches. Suspected carcinogen. Known skin irritant, damaging to the eyes. Extremely drying to the skin.

Ethylparaben
Preservative used in shampoos, face and anti-ageing creams, anti-dandruff shampoos. Also known by trade names Formalin and Formol. Also used in the building industry in insulation, particle board, paints and glues, and also industrial strength cleaners. Preservative and antiseptic in cosmetics, usually in conjunction with parabens. Also used as a pesticide in the cotton industry. Known by its trade name Germall II. Can cause skin irritations and contact dermatitis.

Formaldehyde
Synthetic preservative used in cosmetics and soaps. Petrochemical based antibacterial and solvent used in hair colouring, hair care preparations, hand lotions and antiperspirants. Also known as isopropanol. Known skin irritant, damaging to the eyes. Extremely drying to the skin.

Imidazolidinyl Urea
Preservative and antiseptic used in cosmetics, usually in conjunction with parabens. Also used as a pesticide in the cotton industry. Known by its trade name Germall II. Causes contact dermatitis. Releases formaldehyde.

Isopropyl Alcohol
Emollient, emulsifier and lubricant. Used to lessen greasy feel of products where other ingredients have a high oil content. Used in antiperspirants and deodorants. Known skin irritant, damaging to the eyes. Extremely drying to the skin.

Isopropyl Myristate
Emollient, emulsifier and lubricant. Used to lessen greasy feel of products where other ingredients have a high oil content. Used in antiperspirants and deodorants. Can cause allergic reactions, known skin irritant. Can aggravate acne.

Isopropyl Palmitate
Emollient, emulsifier and lubricant. Used to lessen greasy feel of products where other ingredients have a high oil content. Used in antiperspirants and deodorants. Can cause allergic reactions, known skin irritant. Can aggravate acne.

Lanolin
Obtained from sheep’s wool and used as an emollient, base and emulsifier. Can cause allergic reactions. Can be contaminated with pesticides and fertilizers, depending on where sheep have been raised. It is questionable that the lanolin itself is to blame and not contaminants. Skin and eye irritant.

Lauramidopropyl Betaine
Surfactant found in shampoos and liquid soap substitutes, similar to cocamidopropyl betaine. A preservative used in shampoos and liquid soap substitutes. Can cause allergic reactions. Skin and eye irritant.

Methylchloroisothiazolinone
Used as propellant in aerosols and solvent in paint strippers. Found in hairsprays.
## Harmful Chemicals Used In Soap Making

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Description</th>
<th>Health Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene chloride</td>
<td>Preservative used in conjunction with Methylchloroisothiazolinane in shampoos and liquid soap substitutes.</td>
<td>Headaches, dizziness, nausea. Skin and eye irritant. Also irritates nose and throat at high concentrations.</td>
</tr>
<tr>
<td>Methylisothiazolinane</td>
<td>Synthetic preservative used in cosmetics and soaps.</td>
<td>Causes allergic reactions. Skin and eye irritant.</td>
</tr>
<tr>
<td>Methylparaben</td>
<td>Petrochemical ingredient, manufactured from crude petroleum, used in many moisturisers, creams and lotions. Viscosity refined (i.e. odourless and colourless) and very cheap.</td>
<td>Can cause skin irritations and contact dermatitis. Unproven concerns over possible links to breast cancer.</td>
</tr>
<tr>
<td>Mineral oil</td>
<td>Synthetic preservatives used in cosmetics and soaps.</td>
<td>Can cause skin to develop clogged pores because it suffocates the skin and prevents it from breathing. Skin and eye irritant.</td>
</tr>
<tr>
<td>Parabens</td>
<td>Derived from sources including petroleum and coal. Used as a thickener for cosmetics, also called soft white paraffin or liquid paraffin. Found in creams, lipsticks, eyebrow pencils.</td>
<td>Can cause skin irritations and contact.</td>
</tr>
<tr>
<td>Paraffin</td>
<td>Synthetic binder and softener found in many cosmetics. Also used as emollients, carriers, emulsifiers and dispersants.</td>
<td>Can cause skin to develop clogged pores because it suffocates the skin and prevents it from breathing. Skin and eye irritant.</td>
</tr>
<tr>
<td>PEG (Polyethylene Glycol)</td>
<td>Petrochemical based humectant, surfactant and solvent, used in creams, lotions, moisturiser, foundation agents, and other cosmetics.</td>
<td>May cause hives and eczema.</td>
</tr>
<tr>
<td>Petrolatum</td>
<td>Synthetic foaming agent, emulsifier and surfactant used in shampoos, soaps, and liquid soap substitutes.</td>
<td>Can cause skin irritations and contact dermatitis. Unproven concerns over possible links to breast cancer.</td>
</tr>
<tr>
<td>Phenoxyethanol</td>
<td>Fatty acid ester used in cosmetics as emulsifiers and stabilisers. Found in shampoos and conditioners, also used in the food industry.</td>
<td>Causes allergic reactions and skin rashes.</td>
</tr>
<tr>
<td>Polysorbates</td>
<td>Synthetic preservative used in cosmetics and soaps. Preservative used in cosmetic creams.</td>
<td>Skin and hair irritant.</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>Petrochemical based humectant, surfactant and solvent, used in creams, lotions, moisturiser, foundation agents, and other cosmetics.</td>
<td>Can irritate the skin, hair, eyes and mucous membranes. Can cause damage to mouth tissue, including ulcers.</td>
</tr>
<tr>
<td>Propylparaben</td>
<td>Synthetic foaming agent, emulsifier and surfactant used in shampoos, soaps, and liquid soap substitutes.</td>
<td>Clogs the pores of the skin, which can cause and exacerbate eczema.</td>
</tr>
<tr>
<td>Quatremium 15</td>
<td>Synthetic foaming agent, emulsifier and surfactant used in shampoos, soaps, and liquid soap substitutes.</td>
<td>Skin and eye irritant. Causes allergic reactions and skin rashes.</td>
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<tr>
<td>Sodium Laureth Sulfate (SLES)</td>
<td>Used as a basic moisturiser, or base cream or lotion for many handmade cosmetics. Contains petrochemicals such as mineral oil, petrolatum or paraffin and other synthetic preservatives.</td>
<td>Known skin and eye irritants, can be drying to scalp. Causes allergic reactions including contact dermatitis, even at low levels.</td>
</tr>
<tr>
<td>Sodium Lauryl Sulfate (SLS)</td>
<td>Fatty acid derived from tallow, animal fats, cocoa butter and other hard vegetable fats. Used as an emollient and base in cosmetics.</td>
<td>Can cause skin irritations and contact dermatitis. Unproven concerns over possible links to breast cancer.</td>
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<td>Sorblene</td>
<td>Synthetic foaming agent, emulsifier and surfactant used in shampoos, soaps, and liquid soap substitutes.</td>
<td>Causes allergic reactions and skin rashes.</td>
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<tr>
<td>Stearic Acid</td>
<td>Used as a basic moisturiser, or base cream or lotion for many handmade cosmetics. Contains petrochemicals such as mineral oil, petrolatum or paraffin and other synthetic preservatives.</td>
<td>Skin and eye irritant. Causes allergic reactions and skin rashes.</td>
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<td>Talc</td>
<td>Used as a thickener for cosmetics, also called soft white paraffin or liquid paraffin. Found in creams, lipsticks, eyebrow pencils.</td>
<td>Can cause skin irritations and contact.</td>
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<tr>
<td>TEA (Triethanolamine)</td>
<td>Found in baby powder, makeup foundations, eye shadows and other powdered makeup.</td>
<td>Suspected carcinogen. Can contain traces of asbestos.</td>
</tr>
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<td>Tetrasodium EDTA</td>
<td>Emulsifying and dispersing agent. Found in soaps, moisturisers, shampoos, conditioners and other cosmetics. Also other products such as detergents, liquid handwash and pharmaceutical drugs.</td>
<td>Mild skin irritant and severe eye irritant. Known sensitiser. Suspected carcinogen.</td>
</tr>
<tr>
<td>Toluene</td>
<td>A chelating agent found in shampoos, facial cleansers, soaps and baby lotions. Chelating agents are used to bind or remove metals to give clarity and enable surfactants to work more effectively.</td>
<td>Skin and eye irritant. May cause allergies such as asthma and skin rashes. Suspected carcinogen.</td>
</tr>
<tr>
<td>Triclosan</td>
<td>Solvent found in nail varnish, hair sprays and other hair products, perfumes and artificial fragrances.</td>
<td>Suspected carcinogen can be a trigger for asthma attacks. Can cause headaches and loss of appetite.</td>
</tr>
<tr>
<td>Trisodium EDTA</td>
<td>Antibacterial found in deodorant, toothpaste and antibacterial soaps.</td>
<td>Skin irritant.</td>
</tr>
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<td></td>
<td>A chelating agent used found in facial cleansers, soaps and baby lotions. Chelating agents bind metals in solutions to reduce cloudiness.</td>
<td>A known skin and eye irritant, may be irritating to mucous membranes. May cause allergies such as asthma and skin rashes. Suspected carcinogen.</td>
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