

# Iodine Types

When I first started to research iodine I was very confused about all the different iodine forms and products so I decided to make a page here that runs down the basics.

There two kinds of iodine;

1. Elemental Iodine, sometimes referred to as molecular or sometimes granular. It comes as pure crystals which are used when making tinctures and lugol's solution.
2. The reduced salts (iodide) Commonly used; potassium iodide, sodium iodide and ammonium iodide

## FYI

- Be sure to pay attention to mcg (micrograms) vs. mg (milligrams) 1000 mcg is 1 mg
- An iodine stain can be removed using Vitamin C
- The iodine patch test where you paint on a circle of iodine on your skin and wait to see how long it takes to disappear to see if you need iodine has been proven by the iodine docs to be unreliable. The factors of humidity and evaporation and other unknowns such as the use of a skin product with vitamin C show that the color staining of the skin cannot be relied upon. Look to symptoms of iodine deficiency instead, or do the iodine loading test at <http://www.hakalalabs.com> there is a paper on <http://www.optimox.com> showing the research on the patch test

*Here are some specific Iodine terms that fall into other Iodine categories*

Atomodine - See "Detoxified Iodine"

Decolorized Iodine – See "Tincture of Iodine"

Detoxadine - See "Pureodine Process"

Edgar Cayce Iodine - See "Detoxified Iodine"

Heritage - See "Detoxified Iodine"

Hulda Clark See – "Lugol's - Dr. Hulda Clark's Modified Version"

Iodides Tincture – See "Tincture of Iodine"

Iodormere – See Standard Process Products

Liquid Iodine Forte – See "Potassium Iodide"

Magnascent - See "Detoxified Iodine"

Nascent - See "Detoxified Iodine"

Pro-KI – See "Potassium Iodide"

Promaline Iodine – See "Standard Process Products"

Pureodine – See "Pureodine Process"

SSKI - See "Potassium Iodide"

Xodine - See "Pureodine Process"

## **Detoxified Iodine - Edgar Cayce**

Atomodine, Nascent, Heritage, Magnascent

Everybody online thinks their version of the Edgar Cayce iodine is best LOL, they also think it is superior to lugol's. It is a lot more expensive and some people prefer it for the "energy effect" they get from it. One woman on the Cure Zone website describes the Cayce versions like this.

There are the two different Cayce readings about iodine. both have a tincture in a beaker suspended in an electrolyte solution and having electricity pass through the solution and create an electromagnetic field around the beaker of tincture. one reading says to do this for an hour or so. that is the detoxified I2. this is a misleading designator, but that is what it is called. the magnascent iodine is made according to another reading that has the tincture suspend in the magnetic field for 24 hours (or more, i am not sure).

## **Atomidine / Nascent**

Nascent This form of iodine is produced by subjection of a 1 % tincture of iodine to a high electro magnetic field for a given time in order to produce the nascent iodine state. This atomic state and electromagnetic charge is held by the atom until diluted in water and consumed. The iodine being in the atomic state was the reason it was called Atomidine, for Atomic Iodine (1926 to 1935).

One drop of Nascent iodine = RDA of 0.2 mg. If using for additional energy and general improved health take up to 5 drops daily. That would mean only one milligram.

Always take on an empty stomach

## **Heritage**

I found this quote about Heritage which is interesting considering it is made by the Heritage people which is Edgar Cayce's family, I would think they would be the ultimate authority on the Edgar Cayce method

Heritage – These Iodine's are produced at 10 amps of resistance for five minutes. These other iodine's do not produce nor give the same results. Nascent Iodine is more difficult to produce. The time required to get iodine into the nascent state is 15 to 20 minutes at 30 amps with a very limited quantity of iodine. The result is that heat is generated and that must be dissipated in order to have the process continue.

## **Magnascent**

From the makers sounds like it is simple a brand name of Nascent I do know that Dr. Brownstein had his patient that runs the iodine list on yahoo use this form for someone in her family for a particular issue. I don't recall the particulars but everyone in her family is also on Iodoral.

MAGNASCENT™ Source

The chemical purity of the iodine in MAGNASCENT™ is greater than or = 99.8%. We are more concerned about the purity than the actual source. Iodine from seaweed may possibly contain impurities found in the ocean such as arsenic, bromine in quantities that are not desirable or healthy.

SUPPLEMENT FACTS

Serving Size: 1 drop One drop = RDA of 0.2 mg

Servings Per Bottle: 480

Packaging: 1-ounce glass bottle

Ingredients

Nascent Iodine in a base of organic grain alcohol.

Recommended: Take on an empty stomach 30 minutes before or 1 hour after meals, medications and/or supplements. Taking it after 4 PM could raise your energy levels and keep you awake at night. It is recommended to take before breakfast, before lunch and then again before 4 PM.

Note: There is a 2 to 3 hour time frame when MAGNASCENT™ is very active in the body. This is the reason that in the 1930's, nascent iodine was taken in small doses several times a day, on an empty stomach. We speculate that the body can use this unique iodine best while this energy is available.

## **Iodine Plus2**

This product has the same amount of iodine/iodide per pill as Iodoral with a tiny bit of selenium and vitamin B-2. 60 tablets per bottle. It is about 25.00 per bottle, the five bottle deal makes it 19.99 per bottle or 33 cents per pill. Iodoral is typically 18-20 cents per pill.

## **Iodized salt**

There is not much iodine in iodized salt, when I was a child, iodine was also added to breads and baked goods. We used iodized salt and we had no real bromide or fluoride exposure. Now though bromide is in baked goods not iodine. The reality is that 85% of the iodine in a container of iodized salt evaporates in the first 3 weeks after the container is opened. The salt is refined and processed which makes it unhealthy and many people are told to avoid salt. All these things make salt a terrible way to get iodine. You should be only using unrefined salt like Celtic Salt or Redmond's Real Salt and getting your iodine elsewhere.

## **Iodoral**

Iodoral is a combination of both elemental iodine and potassium iodide in the same ratio as lugol's solution but it is in pill form. One pill of the original tablets is 12,5 mg, the pills are made by Optimox corporation started by one of the iodine doctors, Dr. Abraham. They found that some people had difficulty with an upset stomach with higher doses of lugol's and developed iodoral to survive the stomach and be used in the intestines. They come in bottles of 90 or 180. Since the original iodoral became available there is now also a 50 mg pill, that come in bottles of 30 or 90. There is an ongoing study now with lugol's and iodoral to see if one is more effective than the other. Most of the people on the iodine list use the iodoral because they simply prefer the ease of taking a pill, the lugol's solution is cheaper though but tastes bad to many.

The docs recommend taking Iodoral with food. The tablets are scored making them easy to split if someone wanted to take a 6.25 mg dose

## **Iogen**

Iogen is a new iodine supplement created for fibrocystic breasts. It contains 3 mg elemental iodine per tablet with selenium, magnesium, mannitol, sorbitol, sodium carbonate, croscarmellose sodium. They sell a 60 pill bottle for 19.95 saying it is a 60 day supply but then recommend you take 6 mg (2 pills) which would make it a 30 day supply. They claim it is an introductory offer that is a 70% discount. So it is massively overpriced even at the current price. It contains ingredients that are not necessary just so it can be patented. They also try and claim that it is safe because it is elemental iodine not potassium iodide. Potassium iodide has been used safely in gram size doses for a long time. It is the classic our iodine is good and everyone else's iodine is dangerous marketing campaign that charges extremely high prices for low dose of iodine.

## **Iosol**

Is iodine from kelp and ammonium iodide in glycerin. It has been used since 1945. I don't know any more about it than that. Some people feel iosol functions better in the body because they believe that potassium iodide congests the thyroid. Everything I have read indicates that potassium iodide is the preferred form for the thyroid. The studies that suggest it congests the thyroid are the same flawed studies

that suggest that too much iodine causes Hashimoto's thyroiditis which has already been disproven. Being glycerin based I would think Iosol would be a good alternative for use on the skin in sensitive areas.

One drop is 1.8 mg of iodine.

## **Kelp - Seaweed**

Kelp is the most common iodine supplement and it is in all the health food stores. Most kelp is very low dose iodine in the micrograms close to the RDA. The RDA is very low and only takes into account the amount of iodine needed daily to avoid goiter. Another issue with kelp though is that it is very hard to find kelp that is not contaminated with arsenic. Kelp is naturally very high in bromide as well so any iodine you are taking in may in essence be getting canceled out by the bromide in the same supplement.

Dr. Brice E. Vickery makes a kelp sourced product if that is what you really want that is at a dose that is more compatible with the iodine protocol. (3 capsules is 12 mg) It is called Vickery Sea Plant Minerals <http://www.supernutrient.com/iodine/index.php>

Contamination is also a big issue with seaweed. You may be able to find a seaweed sourced iodine in a larger dose than kelp.

## **Lugol's Solution**

Lugol's solution is the most common form of iodine supplement, it has been in use since the 1829. There is an incredible amount of information that has been written on the use of Lugol's over this time. When the iodine doctors started their research they used lugol's and eventually Dr. Abraham developed Iodoral (see below)

Effective August 1, 2007, the DEA now regulates Lugol's solution (and, in fact, all iodine solutions containing greater than 2.2% iodine) as a List I precursor because it may potentially be used in the illicit production of methamphetamine.

A 5% solution is the highest percentage that can be sold under federal law in the United States You can only buy one ounce of this percentage. California only allows a 2% solution to be sold. The 2% solution is available in larger sizes and the number of bottles you can purchase are not limited, Some other countries have laws that allow higher percentages.

Most people take lugol's in water. You can take it in juice but you need to be aware that if it is a juice high in vitamin C that the elemental iodine will be transformed into iodide by the Vitamin C. Many people paint on lugol's especially those with breast cancer. Some prefer this method to get the iodine to a specific area of the body. Some iodine will be lost by evaporation and so forth so you can't accurately know your dose with trans-dermal application alone. For that reason most of us take a specific internal dose then paint on lugol's, provodone, or tincture of iodine, in addition to that dose if we have a specific reason.

## **Lugol's Dosing**

- 2% solution 2.5 mg per drop (5 drops for 12.5 mg equal to one iodoral pill)
- 5% solution 6.25 mg per drop (2 drops to equal one iodoral pill)

- 7% solution 8.75 mg per drop
- 15% solution 18.75 mg per drop

What exactly is Lugol's?

from Wikipedia

Lugol's iodine, also known as Lugol's solution, first made in 1829, is a solution of elemental [iodine](#) and potassium iodide in water, named after the [French](#) physician [J.G.A. Lugol](#). Lugol's iodine solution is often used as an [antiseptic](#) and [disinfectant](#), for emergency disinfection of drinking water, and as a reagent for starch detection in routine laboratory and medical tests .

Lugol's solution consists of 5 g [iodine](#) (I<sub>2</sub>) and 10 g [potassium iodide](#) (KI) mixed with 85 ml [distilled water](#), to make a brown solution with a total iodine content of 130 mg/mL. Potassium iodide renders the elementary iodine [soluble](#) in water through the formation of the [triiodide](#) (I<sub>3</sub><sup>-</sup>) ion. It is not to be confused with [tincture of iodine](#) solutions, which consist of elemental iodine, and iodide salts dissolved in water and alcohol. Lugol's solution contains no alcohol.

Other names for Lugol's solution are I<sub>2</sub>KI (Iodine-Potassium Iodide); Markodine, Strong solution (Systemic); Aqueous Iodine Solution BP.

Lugol's was often used in the treatment of [gout](#). It was also used at one time as a first line treatment for severe [hypothyroidism](#) due to iodine deficiency in adults. It was used by the [Polish](#) government in [1986](#), after the [Chernobyl disaster](#) to replace and block any intake of radioactive [iodine](#)<sup>[31][2]</sup>.

Historically, Lugol's iodine solution has been widely available and used for a number of health problems with some precautions.<sup>[3]</sup> Lugol's is sometimes prescribed in a variety of alternative medical treatments.<sup>[4][5]</sup>

## Lugol's - Dr. Hulda Clark's Modified Version

Dr. Clark believed in making your own lugol's solution because she thought manufactured lugol's may be contaminated with propyl alcohol. Since lugol's is water based not a tincture which is alcohol based I am not sure where that concern originates. Dr. Clark also felt it was hard to find a source of potassium iodide to make lugol's solution that she was comfortable with the quality of the product. I have no idea what her concerns were but she chose to use a recipe for a modified lugol's solution that replaced the potassium iodide with sodium iodide. Here are the ingredients for her version

**Ingredients:** 1 fluid oz. water, 1.18 gm sodium iodide, 0.59 gm granular iodine (890mcg Iodine in ½ drop). Packed in a clear HDPE bottle, dropper included. Store at room temperature.

HDPE ( High-density polyethylene) is a plastic bottle. Personally I don't think any kind of medicinal like lugol's or an herb tincture for example should be in anything other than a glass bottle.

## Potassium Iodate (KI03)

This a form of iodine used by some manufacturers of nuclear protection pills

<http://www.nukepills.com/potassium-iodate-vs-potassium-iodide.html>

Several internet-based companies have been marketing potassium iodate (**KI03**) for radiation protection in place of potassium iodide (**KI**). Though the names are similar, the products are very different, and the US Food and Drug Administration has expressed serious concerns about the safety and effectiveness of [iodate](#), and the fact that its manufacturers are not in conformity with FDA rules to assure safety, quality and purity of the product. Although the FDA has been successful at removing most iodate products from store shelves, iodate can still be found on the internet

and is falsely claimed to be FDA approved on the Wikipedia website. Wikipedia unwittingly allows dosage charts and other false claims concerning this unapproved drug to be posted by sellers of iodate who edit the page.

➤ [View FDA warning letter to seller of Potassium Iodate](#)

FDA's actions are based on the documented pharmacological advantages of Potassium Iodide (KI) compared to Potassium Iodate (KIO<sub>3</sub>) for thyroid blocking in a radiation emergency.

First, from the standpoint of safety and side effects, there is no question that potassium iodide (KI) is superior. It has been studied for over 100 years and used as a pediatric cough-cold medicine at much larger doses over this time with hardly any problems. In fact, the FDA has concluded that for use among the general population, there are "*not sufficient grounds from which to conclude, or even to suggest, a significant and quantifiable proportion of serious reactions.*" (Symposium on Health Aspects of Nuclear Power Plant Incidents: Recommendations on the Use of Potassium Iodide: An FDA Update; April, 1983) The expected frequency of adverse reactions to KI in doses needed for thyroid blocking is as low as 1 in 10 million, and these are almost always mild and fully reversible.

But the same cannot be said of iodate which is far more likely to cause problems. This was noted by the World Health Organization and International Atomic Energy Agency in their working document (entitled "Guidelines for Stable Iodine Prophylaxis Following Nuclear Accidents," dated 10/19/98) in which they compared iodide and iodate, and concluded that "*Potassium iodide (KI) is the preferred alternative, since potassium iodate (KIO<sub>3</sub>) has the disadvantage of being a stronger intestinal irritant (see page 17).*" In an radiation emergency where millions of people might be required to take thyroid blocking action, the problematic side effects of iodate could be significant.

Secondly, potassium iodide is also superior from an "effectiveness" standpoint. Iodide breaks down and is absorbed by the body much faster and more thoroughly compared to iodate. This was pointed out by the US National Council on Radiation Protection and in the December 15, 1978 Federal Register monograph from the US FDA which noted, "*a number of factors were considered in choosing iodide (and specifically potassium iodide) over other agents such as...iodate. These factors included the degree of blocking achieved, the rapidity on onset of the blocking effect, the duration of the blocking effect, and the safety of the blocking agent.*" The blocking effectiveness of potassium iodide was called "almost complete." It was for these reasons that the FDA called iodide the "most suitable" product for radiation protection, and has never approved any iodate product for thyroid blocking use.

## **Potassium Iodide – SSKI**

The common pill form of potassium iodide is available everywhere for protection in a nuclear emergency. The liquid form is called SSKI (Super Saturated Iodide Solution). The thyroid prefers potassium iodide and will take what it wants first before the rest of the body gets anything. Other parts of the body such as the breasts and prostate like the elemental iodine which is why the iodine docs use lugol's and iodoral instead of SSKI. Potassium iodide has been used in large doses (like grams vs. milligrams) as an antifungal. Potassium iodide has been used safely in doses as high as 6 grams without side effects. It is primarily the elemental iodine that people are afraid of although the more research done, the more that fear seemed to be overblown. What were once thought of as iodine toxicity now appear to be bromide toxicity as the iodine forces the bromide out of the body. If you have a lot of fear, starting with some potassium iodide alone may be a possibility for you.

**Liquid Iodine Forte** is potassium iodide and supplies the tiny dose of 150 mcg of iodine per drop

**Source Naturals Potassium Iodide** this supplement company makes a potassium iodide pill that is 32.5 mg per pill and comes in bottles of 60, 120 and 240.

**Pro-KI** is a product that is 200 pills per bottle – 65 mg each

From Wikipedia

Potassium iodide is used medicinally in tablets, usually containing 130 mg of KI, or as a "saturated solution of potassium iodide" (**SSKI**) which in the U.S.P. generic formulation contains 1000 mg of KI per mL (or 500 mg KI in 10 drops, assumed to be 0.5 mL). <sup>[2]</sup>

### **Radiation protection**

Following the [Chernobyl nuclear reactor disaster](#) in April, 1986, a saturated solution of potassium iodide (**SSKI**) was administered to 10.5 million children and 7 million adults in [Poland](#)<sup>[9]</sup> as a prophylactic measure against accumulation of radioactive [iodine-131](#) in the [thyroid](#) gland.

Potassium iodide was also approved in 1982 by the US FDA to protect the [thyroid](#) glands from [radioactive iodine](#). In the event of an accident or attack at a [nuclear power plant](#), or fallout from a nuclear bomb, several volatile fission product radionuclides may be released. <sup>131</sup>I is a common fission by-product and is particularly dangerous as the body concentrates it in the thyroid gland, which may lead to thyroid cancer. By saturating the body with a source of stable iodide prior to exposure, inhaled or ingested <sup>131</sup>I tends to be excreted. Potassium iodide cannot protect against any other causes of [radiation poisoning](#), nor can it provide any degree of protection against [dirty bombs](#) that produce radionuclides other than isotopes of iodine. In case of a [nuclear emergency](#), [iodine](#) used for the cleaning of wounds should **not** be ingested.

## **Providence / Betadine**

This is the iodine you will find in first aid kits and in your local grocery or drug store. This form is also used in hospitals in different strengths. My mom, a nurse of 50 years recalls that Lugol's was used and she can't recall exactly when they switched over to this form. Although the below from Wikipedia says it is available in 9 to 12% available iodine the bottle in my bathroom says it is a 10% solution with only 1% available iodine. Not for internal use.

From Wikipedia

Povidone-iodine (PVP-I) is a stable chemical [complex](#) of [polyvinylpyrrolidone](#) (povidone, PVP) and elemental [iodine](#). It contains from 9.0% to 12.0% available iodine, calculated on a dry basis<sup>[1]</sup>.

This unique complex was discovered at the Industrial Toxicology Laboratories in Philadelphia by H. A. Shelanski and M. V. Shelanski<sup>[2]</sup>. They carried out invitro tests to demonstrate antibacterial activity, and found that the complex was less toxic than [tincture of iodine](#) in mice. Human clinical trials showed the product to be superior to other iodine formulations.<sup>[3]</sup>

It was first sold in 1955, and has since become the universally preferred iodine disinfectant. <sup>[3]</sup>

## **Standard Process Products**

### **Promaline Iodine & Iodormere**

Promaline, Introduced in 1952, this is a pill form of iodine that is 3 mg iodine and 20 mg calcium. Promaline iodine is bound to zein a protein derived from corn. The term promaline refers to this protein or similar protein in the seeds of wheat, rye or other grains. Anyone with a corn allergy therefore should avoid this product. The literature does not specify if the iodine is elemental iodine but since it doesn't say potassium iodide I guess we have to assume it is elemental. Here is the company's fact sheet about the product.

Many people like the dose of this product and that it is in pill form because they want to raise their dosage very gradually and the 3 mg pills make that very easy. The down side is that when you do get up to a high dose it is a lot of pills. Also this product does not have the combination of potassium iodide and elemental iodine that is the basis of the current iodine research.

<http://www.standardprocess.com/display/displayFile.aspx?docid=155&filename=/Public/Lit/TabSheets/prolamineiodine6930.pdf>

Iodormere introduced in 1964 is 200 micrograms of promaline iodine

Standard process also makes other products with iodine:

- Trace Minerals B-12 has 145 micrograms of iodine.
- Cataplex F tablets have 95 mcg iodine

## Tincture of Iodine

Tincture of iodine is alcohol based. Unlike the formula from Wikipedia below I have a tincture of iodine referred to as **decolorized iodine** or **iodides tincture** that is potassium iodide and ammonium iodide. Sometimes this is referred to by the old timers as white iodine. It can be used on the skin to treat a mole or something of this nature but it can be irritating with an alcohol base. It should not be taken internally. It is an old folk remedy for fingernails. The use was to put it on the fingernails every day for a week then once or twice a week thereafter. It has helped my fingernails and of course it doesn't stain. I did notice when I put some on a spot on my face that there is something in my proactiv solution that I use for acne that will turn it orange if I use them at the same time. Now I am more likely to just use lugol's or povodone on the face at night and if any staining is left in the morning just wipe it down with Vitamin C.

I got my decolorized iodine at Wal-Mart, but they had it behind the prescription counter and I had to ask for it even though no prescription is required.

From Wikipedia

Tincture of iodine is a disinfectant, usually 2-7% [potassium iodide](#) or [sodium iodide](#), and elemental [iodine](#), dissolved in a mixture of [ethanol](#) and water. As in the case of [Lugol's iodine](#), the role of iodide and water in the solution is to increase the solubility of the elemental iodine, by turning it to the soluble [triiodide anion](#)  $I_3^-$ . However, since iodine has moderate solubility in ethanol, it is also assisted by this solvent directly.

USP Tincture of Iodine is defined in the U.S. National Formulary (NF) as containing in each 100 mL, 1.8 to 2.2 grams of iodine, and 2.1 to 2.6 grams of sodium iodide. Alcohol is 50 ml and the balance is purified Water.

USP Strong Iodine Tincture is defined in the NF as containing in each 100 mL, 6.8 to 7.5 gram of iodine, and 4.7 to 5.5 gram of potassium iodide. Purified water is 50 mL and the balance is alcohol.

## Tri-Iodine

Tri-iodine, made by a company called EuroPharma, are capsules of iodine that are comprised of 5 mg elemental iodine, 5 mg sodium iodide and 2.5 mg potassium iodide. Each capsule is 12.5 mg. total iodine They also make a version that is 6.25 mg per capsule. The company doesn't offer any information in relation to why they chose sodium iodide as the primary iodide in this product, but the total elemental iodine to iodide ratio is the same as lugol's or Iodoral.

## **Pureodine Process**

Detoxadine - Xodine

This product appears to be a claimed improvement over the Cayce process but glycerin based like Iosol. The term pureodine is the nanocolloidal process used to make it. It is not a typical tincture that they start the process with because it is elemental iodine only, no iodides. The Detoxodine version has 898 mcg per drop. They claim higher uptake of iodine, but at less than 1 mg per drop that won't help much. It's promotion is typical of these types of tinctures they all use the "we are the best" kind of marketing and they cost way too much, which they always say is because of their state of the art process. If indeed they provide greater iodine uptake it may still be cheaper to use regular iodine preparations and take more of them.

## **¿ Use of Iodine in mainstream medicine ¿**

### **RAI**

Radioactive iodine treatment used for killing thyroid cells in hyperthyroid situations and used for iodine uptake scans to diagnose thyroid problems. Many believe that the RAI treatments they received caused cancer later. Radioactive iodine uptake (RAIU) is a test of thyroid function. It measures how much radioactive iodine is taken up by the thyroid gland in a given time period. It is my perspective that radiation is never good and I chose NOT to allow RAIU to be done on my thyroid. They claim there are no side effects and that it is safe and then go on to tell you how to protect your family from the radiation you will be emitting!

Radioactive iodine (I-131) is an isotope created from iodine to emit radiation for medical use. When a small dose of I-131 is swallowed, it is absorbed into the bloodstream in the gastrointestinal (GI) tract and concentrated from the blood by the thyroid gland, where it begins destroying the gland's cells. <http://www.radiologyinfo.org/en/info.cfm?PG=radioiodine>

### **Amiodarone**

Amiodarone is a prescription drug for irregular heart beat. its iodine content is (37.3% by weight), There are many complications to the thyroid using this drug. Dr. Abraham discusses the issues with this drug in this paper.

[http://www.optimox.com/pics/Iodine/IOD-07/IOD\\_07.htm](http://www.optimox.com/pics/Iodine/IOD-07/IOD_07.htm)