**Jarrow Formulas**

**JarroSil™** is a liquid silicon supplement in the form of stabilized silicic acid. Silicon is an essential trace element that is important for the health of the bones and skin, hair and nails, and may help the maintenance of healthy arteries and joints.*

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**Essential for Bone, Joints & Collagen* | Strengthens & Beautifies Hair, Skin and Nails.**

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**Who Can Benefit From this Product?**

Anyone who is concerned about healthy bones and skin needs to ensure adequate silicon intake. Our ability to utilize the silicon in our diets diminishes as we age, so easy-to-assimilate JarroSil also benefits older consumers.

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**What Distinguishes this Product?**

- JarroSil is a stabilized, liquid silicic acid formula that converts to orthosilicic acid when mixed with water or other beverages.
- Orthosilicic acid is the preferred form of silicon for utilization by the body and is much easier to assimilate than colloidal or horsetail silicas.
- JarroSil has a neutral taste, which may be important for many consumers.

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**How Does JarroSil Activated Silicon Function?**

Silicon is an essential trace element for the construction of collagen in human metabolism. Collagen is the building block of the various tissues in the body, including bones, skin and arteries. Silicon has been shown to improve the strength and elasticity of these systems.

Additionally, silicon has a role in the synthesis of GAGs glycosaminoglycans, a set of structural polysaccharides that are used to construct certain tissues like cartilage. Silicon also has a role in cornification, the metabolic reactions that produce hair and nails, and has been shown to increase the strength of these tissues.

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**Supplement Facts**

<table>
<thead>
<tr>
<th>Serving Size</th>
<th>10 drops</th>
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<tbody>
<tr>
<td>Servings Per Container</td>
<td>60</td>
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<table>
<thead>
<tr>
<th><strong>Amount Per Serving</strong></th>
<th><strong>% DV</strong></th>
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<tbody>
<tr>
<td>Silicon</td>
<td>4 mg *</td>
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(Activated Silicon™ formula of molecular clusters of stabilized silicic acid)

| Boron (as sodium borate) | 0.5mg * |
| Zinc (as zinc citrate) | 1mg 6% |

* Daily Value not established.

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**Other Ingredients**

Distilled water and polyethylene glycol. No wheat, no gluten, no soybeans, no dairy, no egg, no fish/shellfish, no peanuts/tree nuts. Store at or below room temperature.

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**Suggested Usage**

Take 10 drops per day; mix into 4 to 8 ounces water or juice and drink promptly.

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**Warning**

Avoid contact with eyes. Do NOT take this product if you are pregnant or lactating.

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**ORDER CODE:** JSIL  **BOTTLE SIZE:** 30 fl ml (1 oz)  **CATEGORY:** Bone & Joint; Hair, Skin & Nails

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*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

For more information visit www.jarrow.com

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Questions & Answers: JarroSil™

1. Why the switch to JarroSil? What is the difference between JarroSil and other OSA products?
   JarroSil represents a new technology for delivering bioavailable active silicon. It was designed to deliver the same biologically active orthosilicic acid as our former product, but with an improved taste that makes it easier to integrate into your health regimen. Both JarroSil and our former product are stabilized orthosilicic acid (OSA) supplements. The predominant difference is the method of stabilization. (To learn why stabilization of OSA is important, read question 5 below). JarroSil uses boron (an important mineral for bone metabolism) and PEG (a tasteless, odorless stabilizer) to produce an easy-to-take stabilized OSA supplement. BioSil is stabilized with an older technology, which utilizes choline as a stabilizer. Both technologies readily yield OSA when diluted (i.e. in a beverage, or in the stomach).

2. I heard that choline was the key to the effectiveness of OSA. Is that true?
   The initial studies on OSA and choline in bone growth and skin collagen content revealed that the silicon, not the choline, was responsible for the majority of health-promoting effects. In fact, choline was used as a control in some of these studies.¹² No subsequent studies have determined any additional benefit of choline (when combined with silicon) for bone or skin health. On the other hand, JarroSil contains boron (at about 50% of the suggested daily intake) as a stabilizer, which has a documented role in bone and joint metabolism.³⁴ Silicon and boron are therefore a natural complement for improving the health of bone and joints.

3. Is PEG in JarroSil safe?
   Yes, PEG is safe. It has a long history as an FDA-approved GRAS (Generally Recognized As Safe) ingredient in foods, pharmaceuticals and dietary supplements. PEG with an average molecular weight between 350 and 9,500 is safe for human consumption. JarroSil uses PEG with an average molecular weight of 400 (PEG-400). PEG should not be confused with ethylene glycol (a toxic compound commonly found in automobile antifreeze). While both sound similar, they are, in fact, vastly different compounds.

4. What is meant by Activated Silicon?
   “Activated Silicon” means that JarroSil is ready to form orthosilicic acid (the preferred form of silicon for utilization by the body) when mixed with liquids or when reaching the stomach.

5. What is a “molecular cluster” of silicic acid?
   “Molecular clusters” refers to the method in which JarroSil is stabilized; the silicon in a bottle of JarroSil exists as small clusters of orthosilicic acid. Unlike colloidal or horsetail silica, the molecular clusters in JarroSil readily separate into orthosilicic acid (the absorbable form of dietary silicon) when mixed with liquids or when reaching the stomach.

6. What does “ortho” and “mono” silicic acid mean? How about disilicic acid? How do these differ from other types of silicon (like horsetail or colloidal)?
   Monosilicic acid is a synonym for orthosilicic acid, which is the simplest and most readily absorbed form of dietary silicon. Disilicic acid refers to two silicic acid units bonded together. Colloidal and horsetail siliconas are long chains (polymers) of connected orthosilicic acid units. The body must digest silicon polymers into orthosilicic acid to absorb them, a process which can be inefficient in some individuals. Therefore, orthosilicic acid and small molecular weight polymers (like disilicic acid) are the preferred forms of silicon for supplementation.

7. How does the absorption of JarroSil compare with that of other forms of silicon available (horsetail, silica gel, food silicates etc.)?
   Orthosilicic acid, in water, has a much greater absorption rate than other forms of silicon. These other forms of silicon tend to be long chains of silicic acid that are not readily absorbed by the body. JarroSil provides Activated Silicon that becomes OSA in the body for high absorption.

8. Why should JarroSil be kept away from the eyes?
   JarroSil in the bottle is acidic. Like lemon juice or vinegar, acids should not come into contact with the eyes. But by mixing (and diluting) JarroSil in liquids, it becomes much less acidic. This is why the recommended usage of JarroSil involves mixing it into water or other beverages.

References