

SIERRASIL JOINT FORMULA 14

Common Names: *SierraSil®*, *SierraSil® Joint Formula14*

Effectiveness: Use of SierraSil is not supported by clinical evidence and use is not recommended.

Safety: Currently lack of evidence necessary to fully assess SierraSil safety.

What is SierraSil®?

- SierraSil® is a proprietary clay mineral complex derived from the Sierra Mountains in the United States. According to the manufacturer, SierraSil® Joint Formula14, at the daily recommended dose of 3 capsules daily, contains the following trace elements:
 - Calcium 23mg, potassium 20mg, sodium 12mg, aluminum 6mg, phosphorus 3.1mg, magnesium 2.2mg, iron 1.2mg, silicon 1mg, manganese 0.15mg, barium 0.1mg, copper 0.033 mg, cobalt 0.014mg, zinc 0.014mg.

What it is it used for in people with rheumatic conditions?

- The manufacturer claims that SierraSil® Joint Formula14 “supports cartilage and joint function associated with exercise and movement”. Clinically, only one study has evaluated SierraSil® in mild-moderate osteoarthritis.

How is it thought to work?

- It has been suggested that SierraSil® may reduce the breakdown of the joint “cushion” (cartilage) caused by chemicals that increase inflammation (inflammatory mediators). The manufacturer also claims it has detoxifying properties, but this has never been shown in clinical trials.

Does it Work? What the Science Says:

SierraSil®
3–4
capsules/day

- One laboratory study evaluated the effect of SierraSil® on human cartilage breakdown; however, it was not effective in reducing the measured biochemical markers of tissue breakdown.
- Only one published clinical study has evaluated the effect of SierraSil® (2 capsules twice daily) in patients with mild-moderate osteoarthritis. Although the patients in the SierraSil® groups achieved significant improvement and pain and functionality as early as 2 weeks, there were no significant differences between the SierraSil® groups and placebo (no treatment) at the end of study period.
- There is limited evidence to support the use of SierraSil® in osteoarthritis.
- The only clinical study found suffers from methodological weaknesses and did not find benefit.
- Considering the cost of the supplement and unclear benefit, the use of SierraSil® is not recommended.

What are possible side effects and what can I do about them?

- SierraSil® Joint Formula¹⁴ is well tolerated when used orally at the recommended dose according to its manufacturer. No serious adverse reactions were reported in the clinical trial available.
- Some transient side-effects may include: Mild headaches, changes in bowel movements, skin irritations, increased pain or swelling, changes in heart rate and/or low energy.

Interactions

With drugs:

- Theoretically, due to its clay structure and properties, SierraSil® may bind to other drugs and supplements. The manufacturer recommended taking SierraSil® 4 hours before or after other medications.

For more information about SierraSil® consult your physician and pharmacist.