

Technical Details

Mean Green Power Hand Scrub Biocompatibility Statement Jan 1, 1984

Mean Green Power Hand Scrub is a chemical formula which can be considered as of negligible toxicity. It contains:

1. No caustic or alkaline ingredients

2. No solvents

3. No acids

It has a delicate Ph of just past neutrality at 7.4 to 7.6. It is compounded with mild, biologically harmonious ingredients in a combination that is considered compatible with human body systems. However, as safe as it is, it is not advisable to eat it or get it in the eyes. Treat it in the same fashion as an adult hair shampoo. It is very difficult to swallow any of it because it produces a gag reaction. But, even if it were ingested, the most harm would be a little diarrhea because the detergent action would destroy non-pathogenic bacteria present in the intestines.

Concerning compatibility as a part of naturally occurring ecological systems, **Mean Green Power Hand Scrub** has been designed to be chemically sympathetic with the balance of life structures and chemical materials found in such natural environments as rivers, lakes and streams.

The cleaning emollient portions of **Mean Green Power Hand Scrub** is made up of anionic and non-ionic surfactants. Further, it contains no phosphates, but biologically disassociating chemicals that are classified as completely biodegradable.

The abradant is not biodegradable, but it is not considered a pollutant. This plastic material, used as a scrubbing agent, is polyethylene in granule form. Polyethylene has been tested and accepted by the pharmaceutical industry for use in facial cleansing preparations designed as adjunctive treatments for acne conditions. The logic behind their choice, as ours, is based on the phenomenon that this material is a straight chain polymer. That is to say there are no side chains or radicals attached:

In fact, it has no other elements of any kind, other than pure carbon and hydrogen. This means it will not break down into something harmful or split off anything that would be toxic. On the other hand, plastics such as vinyl, polyurethane, or even rubber have chlorine and other radicals which split off when exposed to heat or merely exposure to the environment.

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Mean Green Ltd. and companies like Listerine, Westwood Labs and other pharmaceutical houses have selected polyethylene because when it is washed down drains and into the sewage system and into rivers and streams, it will not fractionate into damaging toxins or agents dangerous to those ecological systems.

The granules described above are of a controlled particle size. The individual particles are held to less than 25 micron average diameter, with all of them less than 34 microns. This is smaller than many airborne dust and sand particles that are a continuing part of our natural environment.

Since the granules in **Mean Green Power Hand Scrub**, as well as those of many pharmaceutical preparations, do not fractionate or disassociate or dissolve but are of a stable compound, they in a very real sense are synonymous in their ecological role as the sand or dirt that would be on skin or clothing that is washed and then goes down the drain.

The comparison is even more valid when one considers that sand, SiO₂ (silicon dioxide), is also not biodegradable. It is also washed down the drain and into the water system. It, of course, is also stable and merely becomes a part of the sand bank of the rivers, streams and oceans. The granules of **Mean Green** function entirely and exactly through their cycle in the same manner as the tiny sand or dirt particles and come to rest at last in the same place, doing the same thing.

Therefore, it can be seen that **Mean Green Power Hand Scrub** is a biologically harmonious chemical system that has been designed to be totally biocompatible with natural life support ecological systems.