

BIOBASED PRODUCTS

Environmental/Safety

Profile

41 42 43 46 48 52

Green Seal GS-37	Yes	Yes	Yes	Yes	Yes	Yes
Biodegradability ¹	Yes	Yes	Yes	Yes	Yes	Yes
Biobased Content ²	High	High	High	High	High	High
Phosphate-Free ³	Yes	Yes	Yes	Yes	Yes	Yes
Non-Corrosive ⁴	Yes	Yes	Yes	Yes	Yes	Yes
Non-Toxic ⁵	Yes	Yes	Yes	Yes	Yes	Yes
VOC-Free	Yes	Yes	Yes	Yes	Yes	Yes
Combustible ⁶	No	No	No	No	No	No
Contains APE/NPE ⁷	No	No	No	No	No	No
Contains EDTA ⁸	No	No	No	No	No	No
Contains Glycol Ethers ⁹	No	No	No	No	No	No
Petrochemical Derived	No	No	No	No	No	No
pH	10.3	7.5	7.5	6.5	10.4	2.3
Recyclable Packaging	Yes	Yes	Yes	Yes	Yes	Yes

Definitions of Criteria

- 1 Indicates that the ingredients used in these products are biodegradable in the environment as well as in wastewater sewage treatment plants according to the Organization for Economic Cooperation and Development (OECD) Guidelines for Testing of Chemicals.
- 2 Made with ingredients from renewable plant and animal sources. High biobased content equals 51%-90% per the Biobased Manufacturers Association.
- 3 Contains <0.50% phosphorous per Green Seal (GS-37) requirements and New York Environmental Conservation Law (Article 35, Title 6, Section 659.3).
- 4 Meets OSHA Hazard Communication Standard and meets/is exempt from DOT Hazardous Material Regulations (49 CFR 173.136).
- 5 Meets the requirements put forth by the Organization for Economic Cooperation and Development (OECD) Guidelines for Testing of Chemicals as outlined by Green Seal (GS-37).
- 6 Indicates the flashpoint is >150°F per Green Seal (GS-37) Requirement 4.5.
- 7 Nonylphenol ethoxylate (NPE) and Alkylphenyl-ethoxylates (APEO).
- 8 Sodium ethylenediaminetetraacetic acid (EDTA)
- 9 Includes butyl (2-butoxyethanol) and all other "e" and "p" series glycol ethers.

* Non-corrosive to skin as defined and tested in accordance with the U.S. OSHA Hazard Communication Standard, DOT Hazardous Material Regulations, Canada's WHMIS and TDG regulations. This material is corrosive to aluminum only.

** Due to the inherent nature of quaternary-based disinfectants, they will not meet OSHA Hazard Communication Standard (29 CFR 1910 Subpart Z).



ESSENTIALLY



BIOBASED



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What is a Biobased Product?

Biobased products are made with ingredients from renewable plant, animal or marine resources. Because of this, they are generally safer for the environment than their petroleum-

based counterparts and are usually biodegradable. A great example of a biobased product is bar soap which is made by reacting an alkali (lye) with vegetable oil.



How is Biobased Content Defined?

For a product to be truly biobased, it must have a biomaterial content of 90% or more (apart from any water and inorganics). Very few products sold into the jan/san market meet this definition. The vast majority contain less than 90% biomaterial and fall into one of three categories:

High Biobased Content

Defined as 51% - 90%

Moderate Biobased Content

Defined as 21% - 50%

Low Biobased Content

Defined as 20% or less

Six of Essential's DCS products fall into the **High Biobased Content** category. Each is also Green Seal Certified (GS-37):

Glass Advantage 41

Ultra Spray Cleaner 42

Daily Restroom Cleaner 43

Neutral Cleaner Plus 46

Multi-Purpose Cleaner 48

Peroxide Concentrate 52

