Proposed Item for Biobased Designation

The following biobased product information has been collected to support item designation by USDA for the BioPreferred Program. This summary reflects data available as of November 29, 2007.

Title: Bath Products

Description: Personal hygiene products, including soaps and other cleansers for the body. These products are generally bar soaps, liquids or gels that are referred to as body washes, body shampoos or cleansing lotions.

Companies Supplying Item: 369 companies supplying Bath Products have been identified through internet searches, manufacturer's directories, trade associations, and company submissions.

Industry Associations Investigated: The following industry associations have been investigated for member companies supplying Bath Products:

- United Soybean Board
- National Corn Growers Association
- American Soybean Association
- Corn Refiners Association
- The Handcrafted Soap Makers Guild
- The Soap and Detergent Association
- Botanical Elements Trade Association

Commercially Available Products Identified: Of the companies identified, 888 Bath Products are commercially available on the market.

Product Information Collected: Specific product information including company contact, intended use, biobased content, and performance characteristics have been collected on 101 Bath Products.

Industry Performance Standards: Product information submitted by biobased manufacturers and suppliers indicate that have typically been tested to the following industry standards:

- ASTM International D130 Standard test method for corrosiveness to copper from petroleum products by coppper strip test
- ASTM International D665 Standard test method for rust-preventing characteristics of inhibited mineral oil in the presence of water
- ISO 32 Calibration in analytical chemistry and use of certified reference materials
- Vickers I-286-S Tests for pump wear

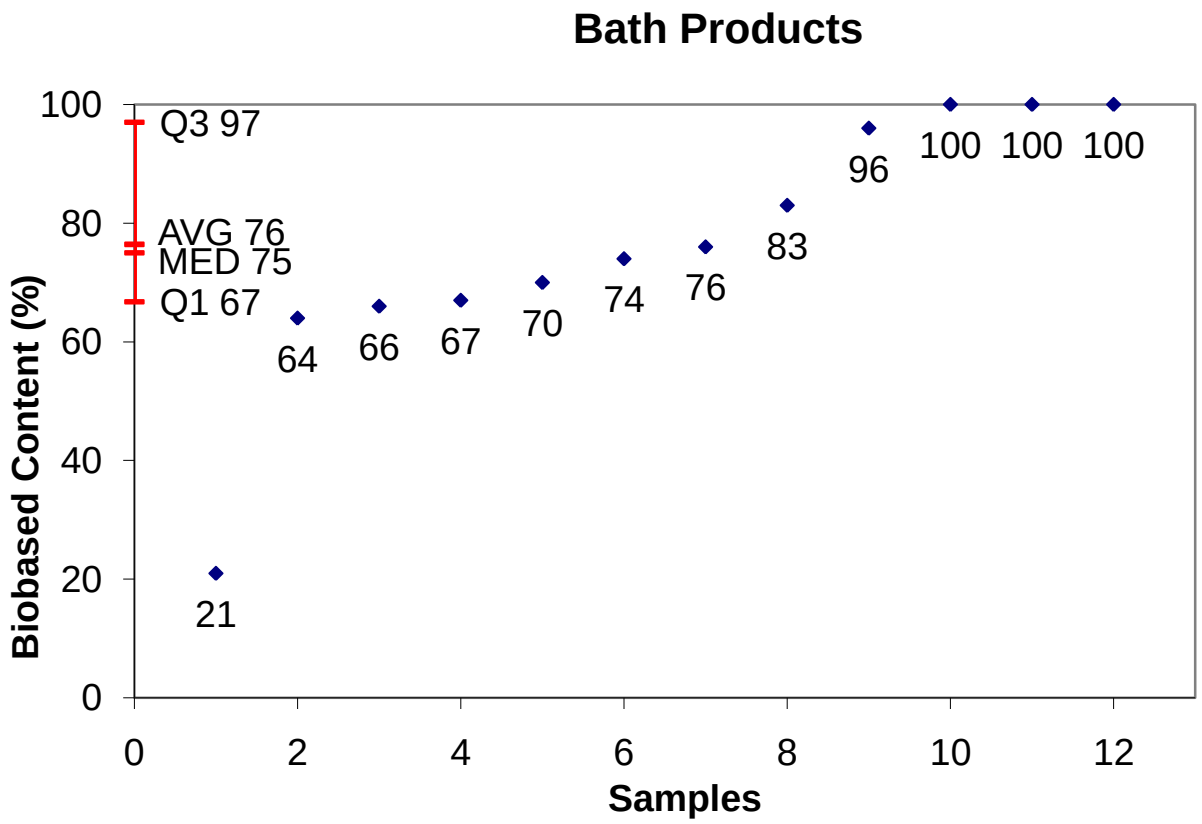
Samples Tested for Biobased Content: 12 samples of Bath Products have been submitted to independent laboratories for biobased content testing as specified by ASTM standard D6866-04.

Biobased Content Data: Results from biobased content testing of Bath Products indicate a range of content percentages from 21% minimum to 100% maximum biobased content as defined by ASTM D 6866-04. A detailed distribution of biobased content levels is included as Appendix A.

Products Submitted for BEES Analysis: Life-cycle cost and environmental effect data for 3 Bath Products have been submitted to NIST for BEES analysis.

BEES Analysis: The life-cycle costs of the submitted Bath Products range from $7.99 minimum to $15.71 maximum per usage unit. The environmental scores range from 0.0067 minimum to 0.0602 maximum. A detailed summary of the BEES results is included as Appendix B.

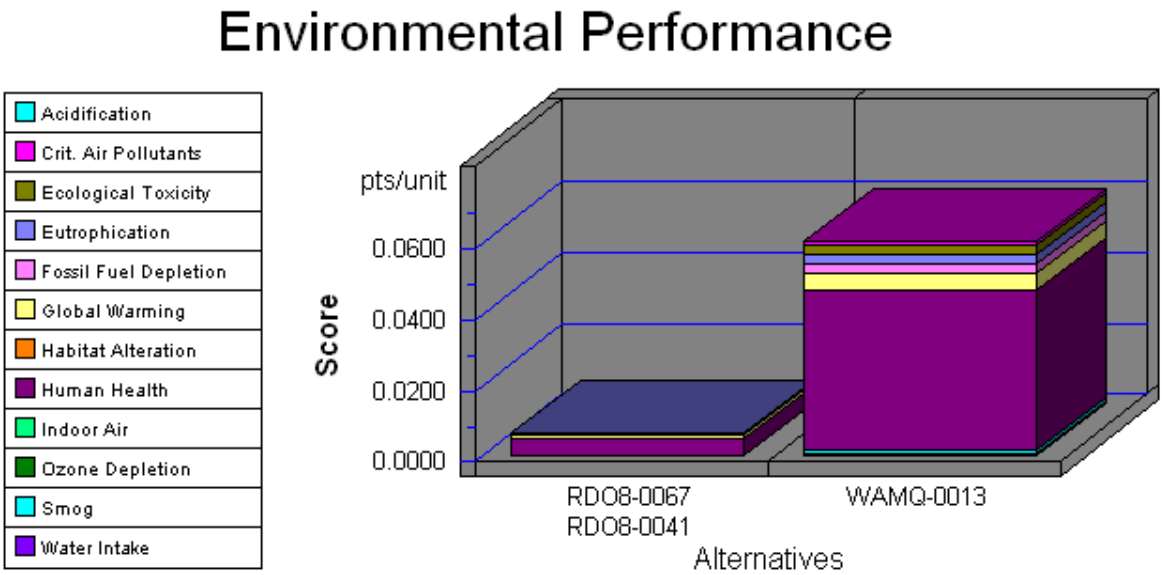
Appendix A - Biobased Content Data



	Company	Product	C14	BEES
1	J995	J995-0005	21	
2	YJ3R	YJ3R-0011	64	
3	P1F3	P1F3-0003	66	
4	RDO8	RDO8-0067	67	Yes
5	RDO8	RDO8-0041	70	Yes
6	RDO8	RDO8-0036	74	
7	VD7X	VD7X-0116	76	
8	WAMQ	WAMQ-0013	83	Yes
9	I677	I677-0009	96	
10	FCM9	FCM9-0009	100	
11	P1F3	P1F3-0002	100	
12	J995	J995-0001	100	

Appendix B - BEES Analysis Results

Functional Unit: 1 gallon



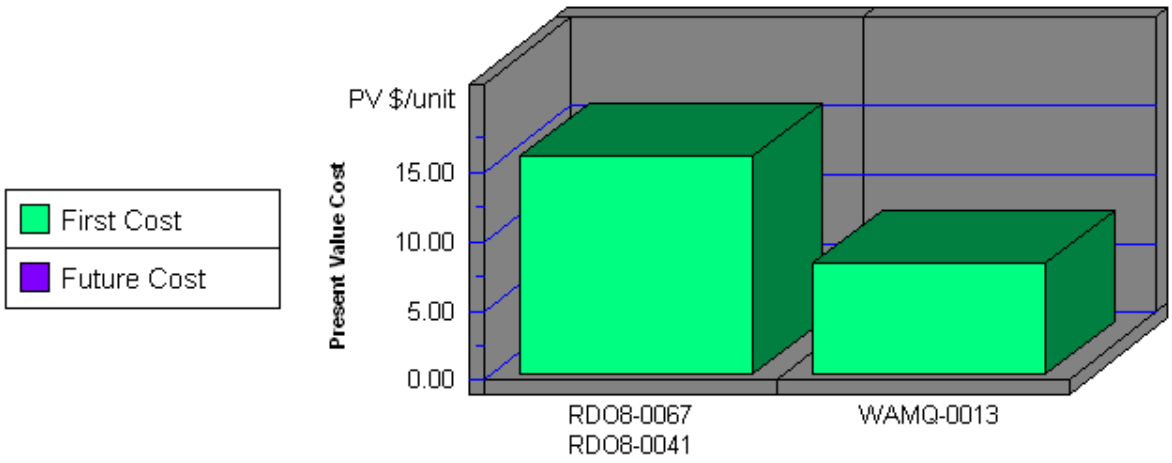
Note: Lower values are better

Category	RDO8-0067 RDO8-0041	WAMQ-0013
Acidification--3%	0.0000	0.0000
Crit. Air Pollutants--9%	0.0001	0.0008
Ecolog. Toxicity--7%	0.0001	0.0029
Eutrophication--6%	0.0002	0.0026
Fossil Fuel Depl.--10%	0.0004	0.0027
Global Warming--29%	0.0009	0.0048
Habitat Alteration--6%	0.0000	0.0000
Human Health--13%	0.0046	0.0448
Indoor Air--3%	0.0000	0.0000
Ozone Depletion--2%	0.0000	0.0000
Smog--4%	0.0003	0.0008
Water Intake--8%	0.0001	0.0008
Sum	0.0067	0.0602

Bath Products			
Impacts	Units	RDO8-0067 RDO8-0041	WAMQ-0013
Acidification	millimoles H^+ equivalents	3.77E+02	1.85E+03
Criteria Air Polutants	microDALYs	1.47E-01	1.65E+00
Ecotoxicity	g 2,4-D equivalents	1.29E+00	3.38E+01
Eutrophication	g N equivalents	6.77E-01	8.44E+00
Fossil Fuel Depletion	MJ surplus energy	1.55E+00	9.41E+00
Global Warming	g CO_2 equivalents	8.06E+02	4.21E+03
Habitat Alteration	T&E count	0.00E+00	0.00E+00
Human Health--Cancer	g C_6H_6 equivalents	2.99E+00	2.92E+01
Human Health--NonCancer	g C_7H_8 equivalents	4.11E+02	4.61E+03
Indoor Air Quality	g TVOCs	0.00E+00	0.00E+00
Ozone Depletion	g CFC-11 equivalents	0.00E+00	0.00E+00
Smog	g NO_x equivalents	9.59E+00	2.97E+01
Water Intake	liters of water	6.29E+00	5.53E+01
Functional Unit	----------	1 gallon	

1 Following are more complete descriptions of units: Acidification: millimoles of hydrogen ion equivalents; Criteria Air Pollutants: micro Disability-Adjusted Life Years; Ecological Toxicity: grams of 2,4-dichlorophenoxy-acetic acid equivalents; Eutrophication: grams of nitrogen equivalents; Fossil Fuel Depletion: megajoules of surplus energy; Global Warming: grams of carbon dioxide equivalents; Habitat Alteration: threatened and endangered species count; Human Health-Cancer: grams of benzene equivalents; Human Health-NonCancer: grams of toluene equivalents; Indoor Air Quality: grams of Total Volatile Organic Compounds; Ozone Depletion: grams of chloroflourocarbon-11 equivalents; Smog: grams of nitrogen oxide equivalents; and Water Intake: liters of water.

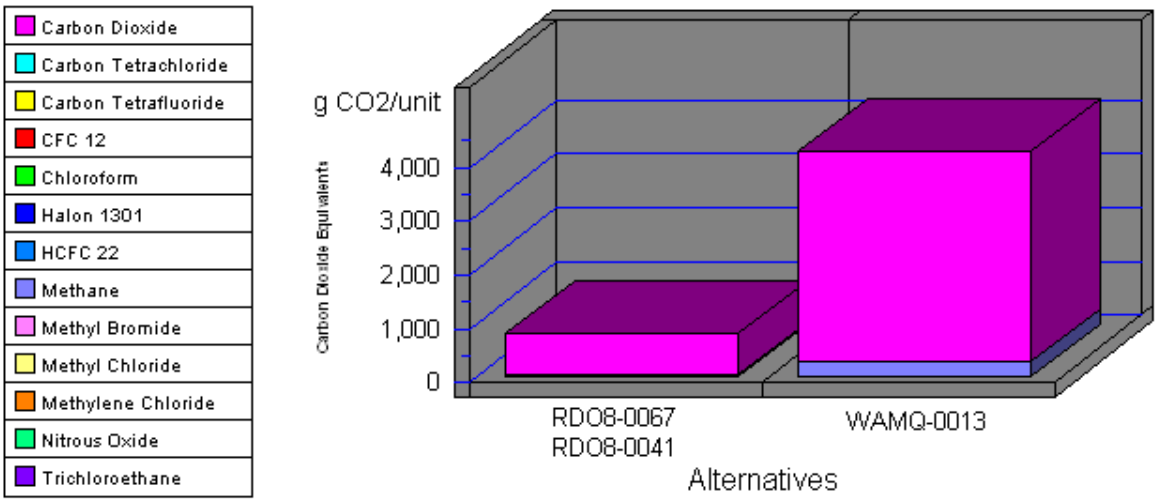
Economic Performance



Category	RDO8-0067 RDO8-0041	WAMQ-0013
First Cost	15.71	7.99
Future Cost-- 3.0%	0.00	0.00
Sum	15.71	7.99

*This is a consumable product. Therefore, future costs are not calculated.

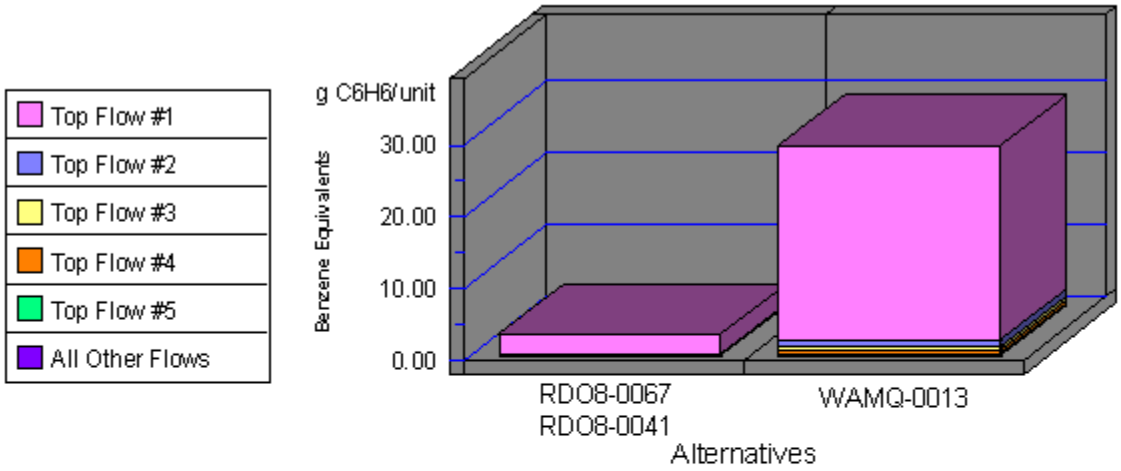
Global Warming by Flow



Note: Lower values are better

Category	RDO8-0067 RDO8-0041	WAMQ-0013
(a) Carbon Dioxide (CO2, net)	760	3909
(a) Carbon Tetrachloride (CCl4)	0	0
(a) Carbon Tetrafluoride (CF4)	0	0
(a) CFC 12 (CCl2F2)	0	0
(a) Chloroform (CHCl3, HC-20)	0	0
(a) Halon 1301 (CF3Br)	0	0
(a) HCFC 22 (CHF2Cl)	0	0
(a) Methane (CH4)	43	291
(a) Methyl Bromide (CH3Br)	0	0
(a) Methyl Chloride (CH3Cl)	0	0
(a) Methylene Chloride (CH2Cl2,	0	0
(a) Nitrous Oxide (N2O)	2	14
(a) Trichloroethane (1,1,1-CH3C	0	0
Sum	806	4214

Human Health Cancer by Sorted Flows*

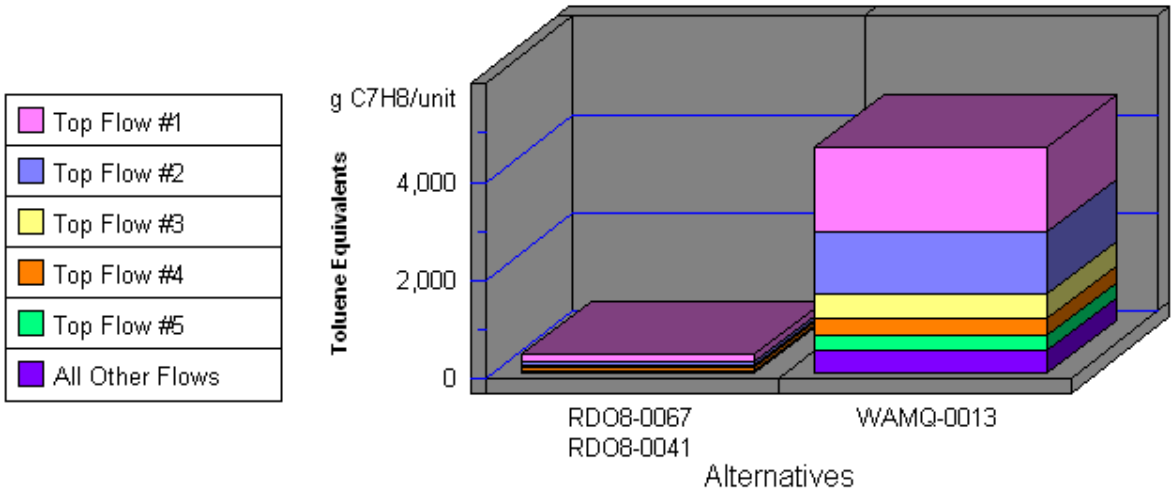


Note: Lower values are better

Category	RDO8-0067 RDO8-0041	WAMQ-0013
Cancer--(a) Ethylene Oxide (C2H	2.73	26.91
Cancer–(w) Phenol (C6H5OH)	0.11	0.77
Cancer–(w) Arsenic (As3+, As5+	0.11	0.72
Cancer--(a) Dioxins (unspecifie	0.03	0.40
Cancer--(a) Arsenic (As)	0.02	0.29
All Others	0.00	0.07
Sum	2.99	29.16

*Sorted by five topmost flows for worst-scoring product

Human Health Noncancer by Sorted Flows*



Note: Lower values are better

Category	RDO8-0067 RDO8-0041	WAMQ-0013
Noncancer--(a) Ethylene Oxide (	175.07	1,726.91
Noncancer--(a) Mercury (Hg)	60.17	1,270.95
Noncancer--(a) Dioxins (unspeci	33.30	498.20
Noncancer--(w) Barium (Ba++)	66.90	337.28
Noncancer--(a) Lead (Pb)	10.26	297.44
All Others	65.31	482.92
Sum	411.03	4,613.70

*Sorted by five topmost flows for worst-scoring product