Proposed Item for Biobased Designation

The following biobased product information has been collected to support item designation by USDA for the Federal Biobased Product Preferred Procurement Program (FB4P). This summary reflects data available as of July 26, 2006.

Title: Glass Cleaners

Description: Materials used to clean glass surfaces on mirrors, computer monitors, car windows, etc.

Manufacturers Identified: 16 manufacturers producing Glass Cleaners 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 producing Glass Cleaners:

- International Window Cleaning Association
- House Cleaning Association
- Glass Association of North America

Commercially Available Products Identified: Of the manufacturers identified, 18 Glass Cleaners 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 4 Glass Cleaners.

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

- U.S. Navy #Navsea 6840 Surface ship (non-submarine) authorized chemical cleaning products and dispensing systems

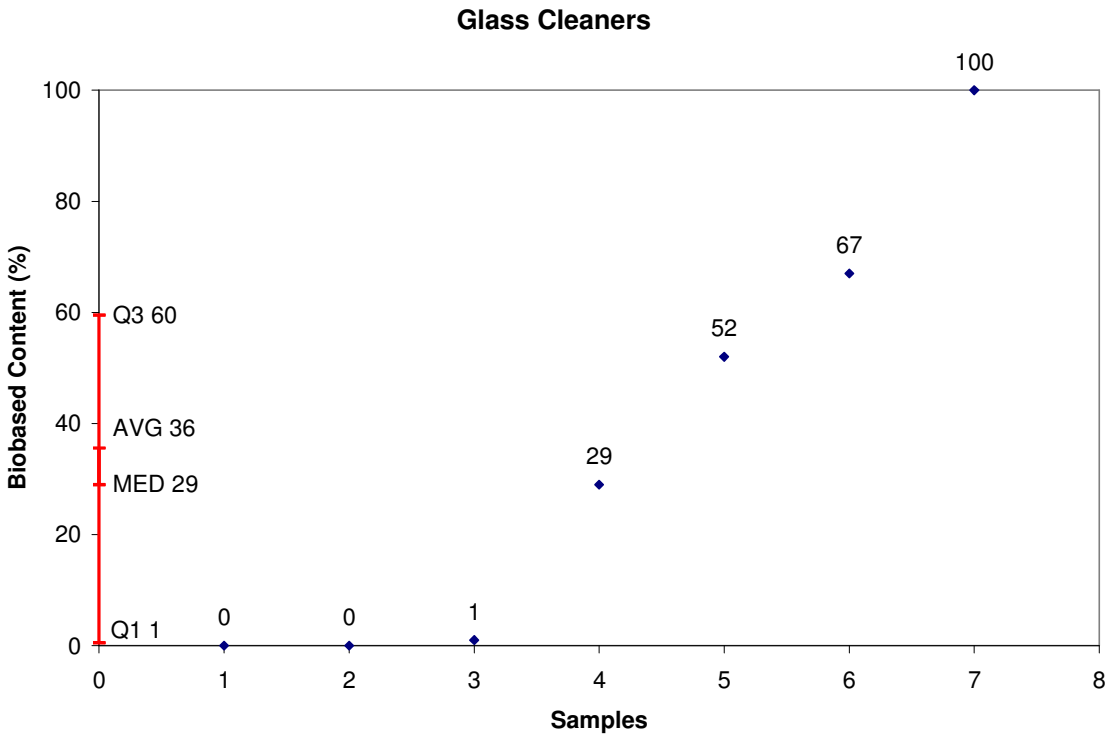
Samples Tested for Biobased Content: 7 samples of Glass Cleaners have been submitted to independent laboratories for biobased content testing as specified by ASTM standard D6866-04.

Biobased Content Data: Results from biobased content testing of Glass Cleaners indicate a range of content percentages from 0% 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 Glass Cleaners have been submitted to NIST for BEES analysis.

BEES Analysis: The life-cycle costs of the submitted Glass Cleaners range from $89.06 minimum to $983.00 maximum per usage unit. The environmental scores range from 0.0878 minimum to 0.9818 maximum. A detailed summary of the BEES results is included as Appendix B.

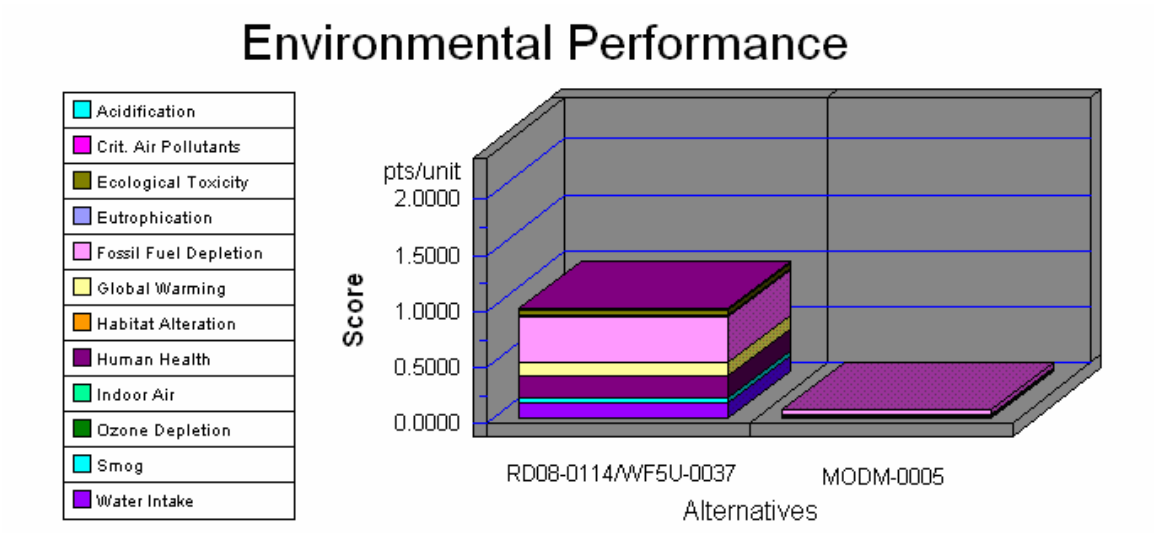
Appendix A - Biobased Content Data



	Manufacturers Identified	Products Identified	C14	BEES
1	RDO8	RDO8-0114	0	yes
2	WF5U	WF5U-0037	0	yes
3	V865	V865-0011	1	
4	MODM	MODM-0005	29	yes
5	K4U8	K4U8-0002	52	
6	C9PX	C9PX-0013	67	
7	VWD1	VWD1-0006	100	

Appendix B - BEES Analysis Results

Functional Unit: 1000 gallons of glass cleaner, diluted and ready for use

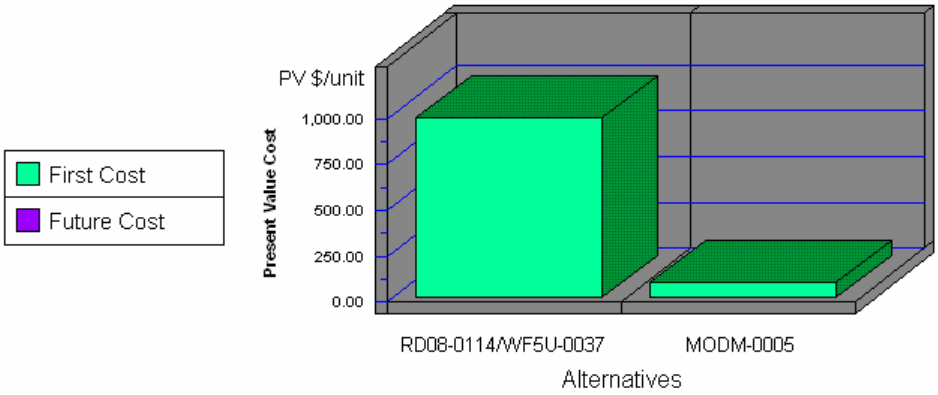


Note: Lower values are better

Category	RD08-0114 WF5U-0037	MODM-0005
Acidification--5%	0.0001	0.0000
Crit. Air Pollutants--6%	0.0064	0.0008
Ecolog. Toxicity--11%	0.0578	0.0092
Eutrophication--5%	0.0124	0.0021
Fossil Fuel Depl.--5%	0.3953	0.0310
Global Warming--16%	0.1317	0.0078
Habitat Alteration--16%	0.0000	0.0000
Human Health--11%	0.1840	0.0108
Indoor Air--11%	0.0000	0.0000
Ozone Depletion--5%	0.0000	0.0000
Smog--6%	0.0492	0.0042
Water Intake--3%	0.1449	0.0219
Sum	0.9818	0.0878

Appendix B (continued)

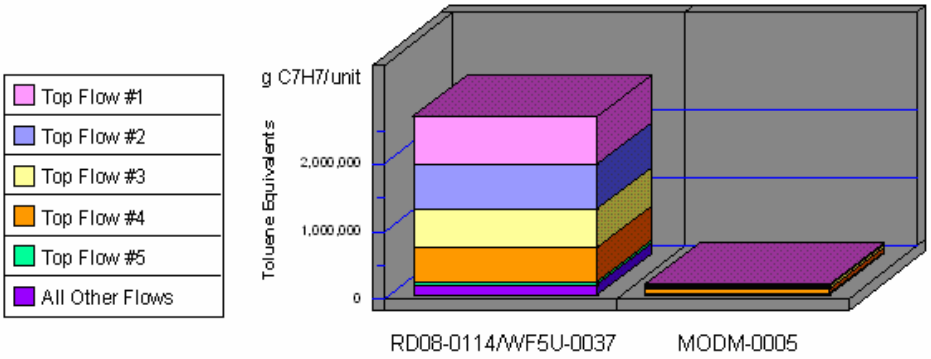
Economic Performance



Category	RD08-0114 WF5U-0037	MODM-0005
First Cost	983.00	89.06
Future Cost-- 3.9%	0.00	0.00
Sum	983.00	89.06

*No significant/quantifiable durability differences were identified among competing alternatives. Therefore, future costs were not calculated.

Human Health by Sorted Flows*



Note: Lower values are better

Category	RD08-0114 WF5U-0037	MODM-0005
Cancer--(a) Dioxins (unspecifie	712,243.51	8,271.21
Cancer--(a) Arsenic (As)	665,212.22	6,568.18
Cancer–(w) Arsenic (As3+, As5+	571,386.81	51,115.02
Cancer–(w) Phenol (C6H5OH)	493,908.80	47,787.28
Noncancer–(a) Mercury (Hg)	42,939.01	6,046.12
All Others	169,522.10	35,675.31
Sum	2,655,212.43	155,463.14

*Sorted by five topmost flows for worst-scoring product