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 August 24, 2006.

Title: Corrosion Preventatives

Description: A substance used to prevent the deterioration of metals.

Manufacturers Identified: 15 manufacturers producing Corrosion Preventatives 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 Corrosion Preventatives:

- Biobased Manufacturers Association
- United Soybean Board
- Biomass Energy Research Association
- National Association of Corrosion Engineers
- Independent Lubricant Manufacturers Association
- Concrete Corrosion Inhibitors Association

Commercially Available Products Identified: Of the manufacturers identified, 97 Corrosion Preventatives 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 12 Corrosion Preventatives.

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

- National Association of Corrosion Engineers #TM0374-2001 Laboratory Screening Tests to Determine the Ability of Scale Inhibitors to Prevent the Precipitation of Calcium Sulfate and Calcium Carbonate from Solution (for Oil and Gas Production Systems)
- American Society for Testing and Materials #D1748-02 Standard Test Method for Rust Protection by Metal Preservatives in the Humidity Cabinet
- American Society for Testing and Materials #D1735-04 Standard Practice for Testing Water Resistance of Coatings Using Water Fog Apparatus
- American Society for Testing and Materials #D445-04e2 Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and the Calculation of Dynamic Viscosity)
- American Society for Testing and Materials #D92-05a Standard Test Method for Flash and Fire Points by Cleveland Open Cup Tester
- American Society for Testing and Materials #D97-05a Standard Test Method for Pour Point of Petroleum Products

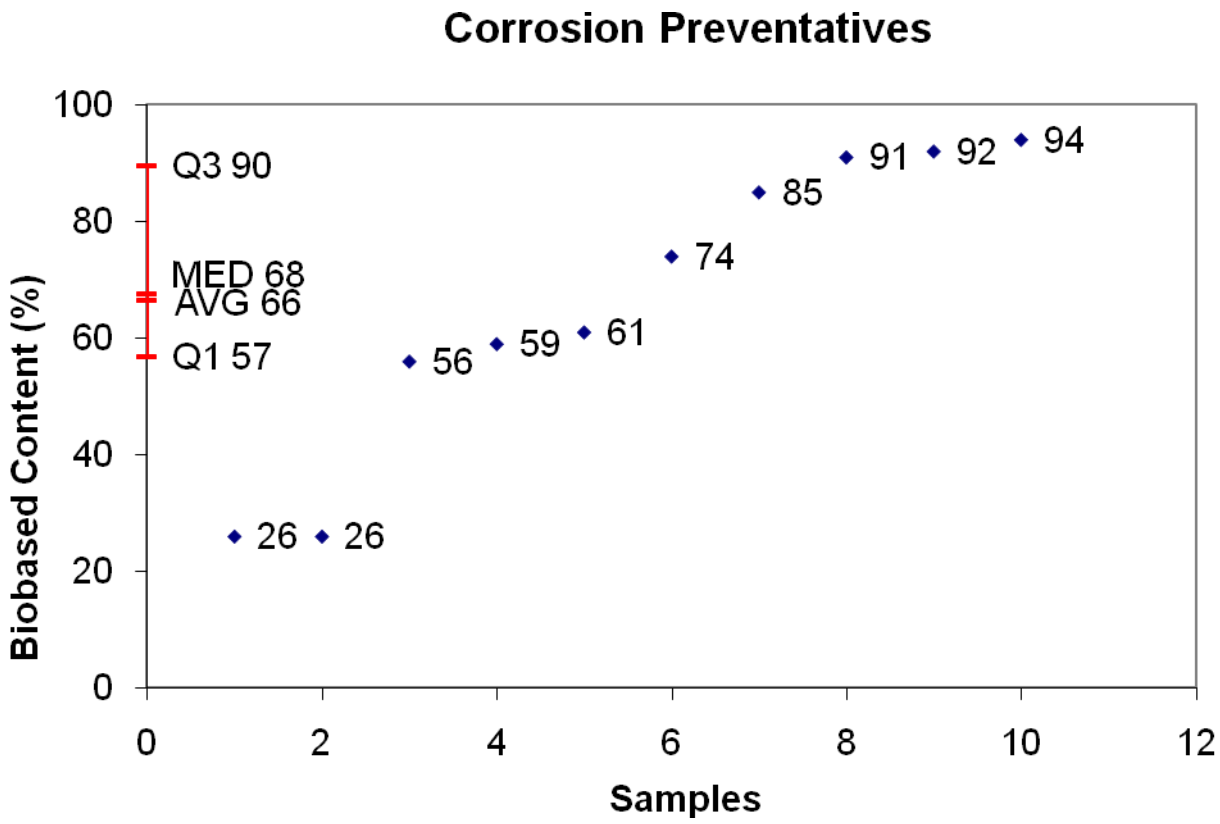
Samples Tested for Biobased Content: 10 samples of Corrosion Preventatives have been submitted to independent laboratories for biobased content testing as specified by ASTM standard D6866-04.

Biobased Content Data: Results from biobased content testing of Corrosion Preventatives indicate a range of content percentages from 26% minimum to 94% 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 2 Corrosion Preventatives have been submitted to NIST for BEES analysis.

BEES Analysis: The life-cycle costs of the submitted Corrosion Preventatives range from $77.09 minimum to $114.75 maximum per usage unit. The environmental scores range from 0.2129 minimum to 0.2684 maximum. A detailed summary of the BEES results is included as Appendix B.

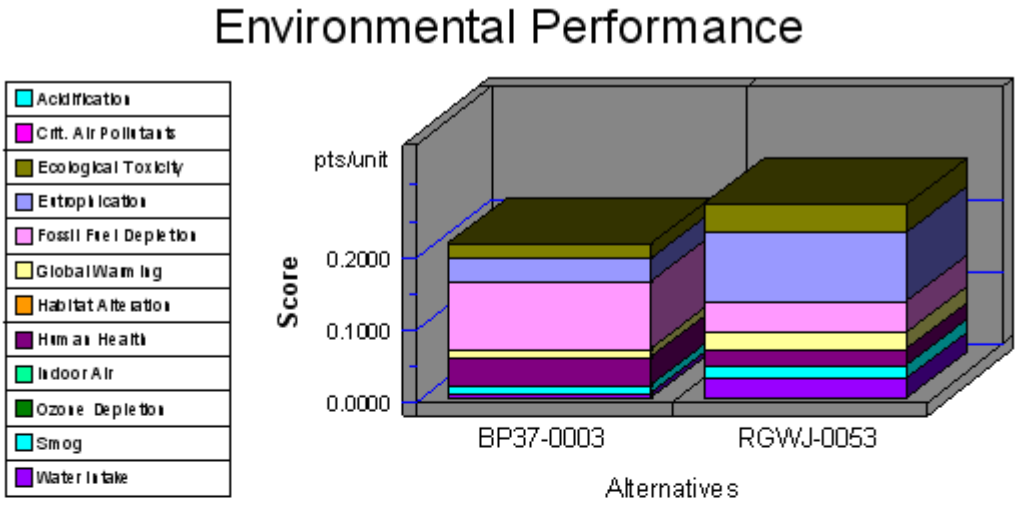
Appendix A - Biobased Content Data



	Companies Identified	Products Identified	C14	BEES
1	BP37	BP37-0006	26	
2	BP37	BP37-0003	26	yes
3	BP37	BP37-0005	56	
4	Z8F8	Z8F8-0001	59	
5	RGWJ	RGWJ-0118	61	
6	RGWJ	RGWJ-0053	74	yes
7	BP37	BP37-0016	85	
8	BP37	BP37-0007	91	
9	G944	G944-0017	92	
10	BP37	BP37-0014	94	

Appendix B - BEES Analysis Results

Units: 5 gallons

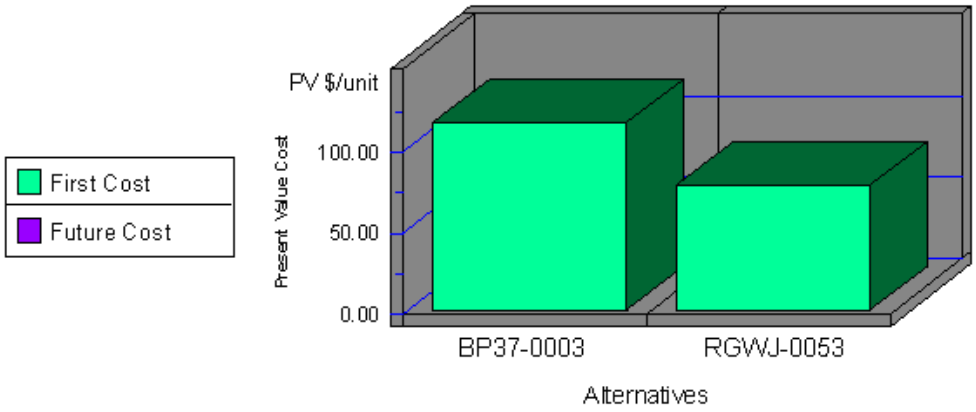


Note: Lower values are better

Category	BP37-0003	RGWJ-0053
Acidification–5%	0.0000	0.0000
Crit. Air Pollutants–6%	0.0006	0.0007
Ecolog. Toxicity–11%	0.0190	0.0389
Eutrophication–5%	0.0312	0.0937
Fossil Fuel Depl.–5%	0.0924	0.0431
Global Warming–16%	0.0124	0.0236
Habitat Alteration–16%	0.0000	0.0000
Human Health–11%	0.0387	0.0228
Indoor Air–11%	0.0000	0.0000
Ozone Depletion–5%	0.0000	0.0000
Smog–6%	0.0097	0.0180
Water Intake–3%	0.0089	0.0276
Sum	0.2129	0.2684

Appendix B (continued)

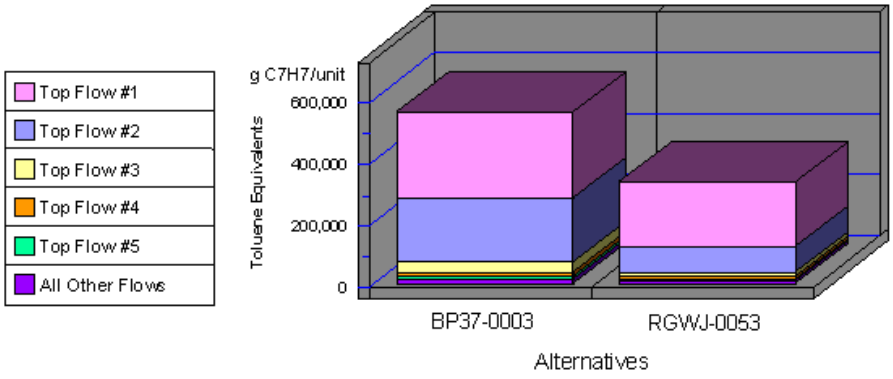
Economic Performance



Category	BP37-0003	RGWJ-0053
First Cost	114.75	77.09
Future Cost-- 3.9%	0.00	0.00
Sum	114.75	77.09

*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	BP37-0003	RGWJ-0053
Cancer--(w) Arsenic (As3+, As5+	278,809.22	204,804.31
Cancer--(w) Phenol (C6H5OH)	210,071.60	83,387.20
Cancer--(a) Dioxins (unspecifie	31,476.57	17,308.28
Cancer--(a) Arsenic (As)	13,640.00	7,414.56
Noncancer--(w) Barium (Ba++)	7,583.08	2,725.37
All Others	16,931.76	13,632.38
Sum	558,512.23	329,272.10

*Sorted by five topmost flows for worst-scoring product