

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 January 24, 2007.

Title: Chain & Cable Lubricants

Description: Must meet or exceed the requirements of petroleum based bar, chain and sprocket oils and have excellent antiwear characteristics and contain special tackiness agent to reduce "sling off" during high speed chain saw operations. Applications include bar and roller chains and wire ropes and cables.

Manufacturers Identified: 20 manufacturers producing Chain & Cable Lubricants 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 Chain & Cable Lubricants:

- Biobased Manufacturers Association
- United Soybean Board
- Independent Lubricants Manufacturers Association
- Wire & Cable Industry Suppliers Association

Commercially Available Products Identified: Of the manufacturers identified, 37 Chain & Cable Lubricants 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 9 Bar and Chain Oils.

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

- Environmental Protection Agency #560/6-82-003 Describes methods for performing testing of chemical substances under the Toxic Substances Control Act
- Environmental Protection Agency #600/4-90-027

Samples Tested for Biobased Content: 9 samples of Chain & Cable Lubricants have been submitted to independent laboratories for biobased content testing as specified by ASTM standard D6866-04.

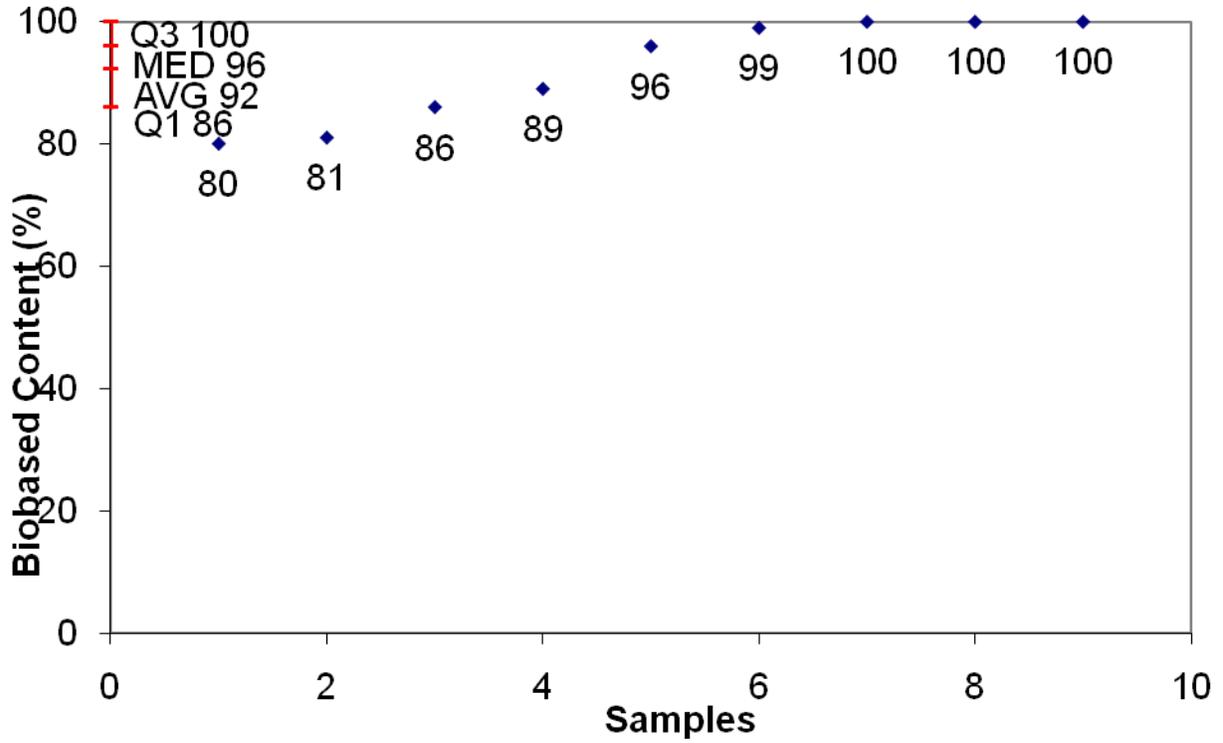
Biobased Content Data: Results from biobased content testing of Chain & Cable Lubricants indicate a range of content percentages from 80% minimum to 100% maximum biobased content as defined by ASTM D 6866-04. A detailed distribution of biobased content levels is included as Appendix A.

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

BEES Analysis: The life-cycle costs of the submitted Chain & Cable Lubricants range from \$10.17 minimum to \$20.20 maximum per usage unit. The environmental scores range from 0.0606 minimum to 0.4202 maximum. A detailed summary of the BEES results is included as Appendix B.

Appendix A - Biobased Content Data

Chain and Cable Lubricants

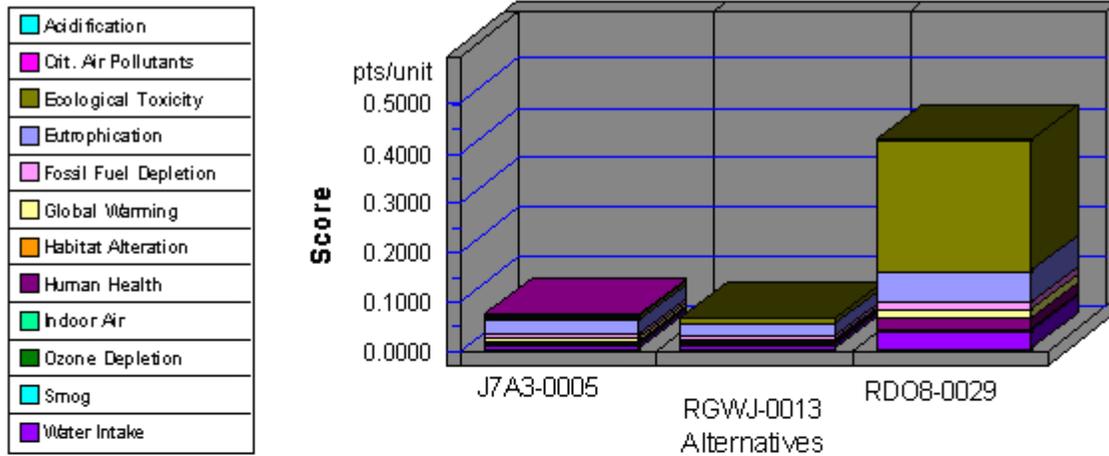


	Companies	Products	C14	BEES
1	RGWJ	RGWJ-0013	80	yes
2	RGWJ	RGWJ-0054	81	
3	BP37	BP37-0004	86	
4	AJTK	AJTK-0052	89	
5	RDO8	RDO8-0064	96	
6	RDO8	RDO8-0029	99	yes
7	J7A3	J7A3-0005	100	yes
8	RDO8	RDO8-0073	100	
9	WF5U	WF5U-0030	100	

Appendix B - BEES Analysis Results

Units: 1 gallon

Environmental Performance

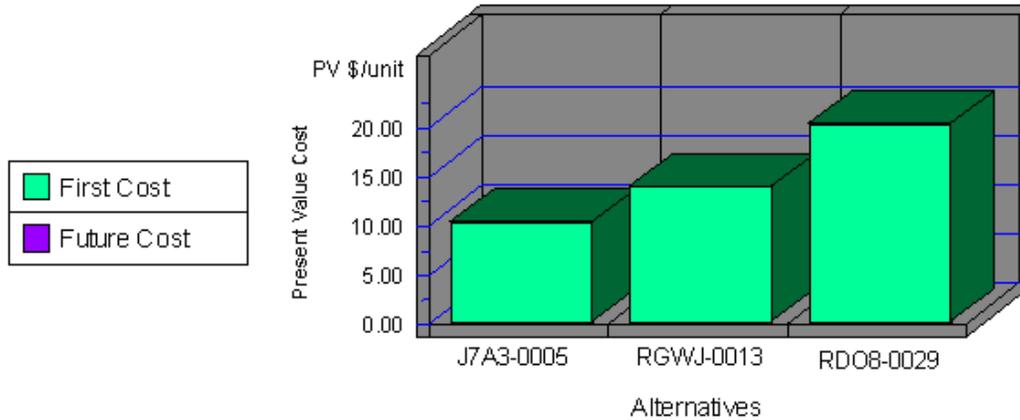


Note: Lower values are better

Category	J7A3-0005	RGWJ-0013	RDO8-0029
Acidification-5%	0.0000	0.0000	0.0000
Crit. Air Pollutants-6%	0.0002	0.0001	0.0003
Ecolog. Toxicity-11%	0.0104	0.0094	0.2630
Eutrophication-5%	0.0272	0.0246	0.0640
Fossil Fuel Depl.-5%	0.0062	0.0056	0.0118
Global Warming-16%	0.0061	0.0054	0.0184
Habitat Alteration-16%	0.0000	0.0000	0.0000
Human Health-11%	0.0043	0.0038	0.0219
Indoor Air-11%	0.0000	0.0000	0.0000
Ozone Depletion-5%	0.0000	0.0000	0.0000
Smog-6%	0.0049	0.0044	0.0038
Water Intake-3%	0.0081	0.0073	0.0370
Sum	0.0674	0.0606	0.4202

Appendix B (continued)

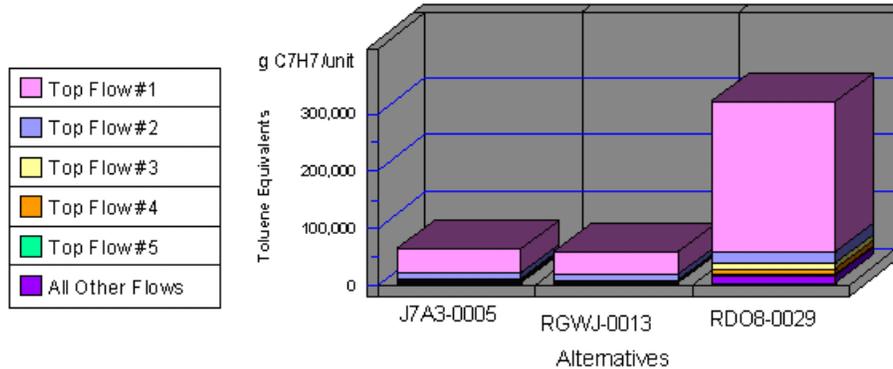
Economic Performance



Category	J7A3-0005	RGWJ-0013	RDO8-0029
First Cost	10.17	13.78	20.20
Future Cost – 3.9%	0.00	0.00	0.00
Sum	10.17	13.78	20.20

*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	J7A3-0005	RGWJ-0013	RDO8-0029
Cancer-(w) Arsenic (As3+, As5+)	42,165.59	39,067.71	261,598.78
Cancer-(w) Phenol (C6H5OH)	10,744.12	10,503.58	19,563.92
Cancer-(a) Dioxins (unspecifc)	3,281.68	1,738.49	9,266.82
Cancer-(a) Arsenic (As)	2,434.22	902.34	8,953.43
Noncancer-(w) Mercury (Hg+, Hg)	531.58	491.86	4,048.35
All Others	2,359.23	2,061.67	12,578.71
Sum	61,516.42	54,765.64	316,010.02

*Sorted by five top most flows for worst-scoring product