

Hacco, Inc.
110 Hopkins Drive
Randolph, WI 53956
(920) 326-2461
(Regulatory Office)
(920) 326-5141
(Manufacturing Location)

In Case of Emergency, Call:
1-800-498-5743 (U.S. Medical Emergency)
1-651-523-0318 (International, Medical Emergency)
1-800-424-9300 (U.S. CHEMTREC)
1-703-527-3887 (International, CHEMTREC)
(collect calls will be accepted on all lines)

1. PRODUCT IDENTIFICATION

Product Name: **BioSentry[®] FarmFluid S[™] Disinfectant**
 EPA Signal Word: **DANGER**
 Chemical Name: Cresol Compound
 Chemical Class: Disinfectant
 Registration Number:

Section(s) Revised: New Issue

2. COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen	Concentration %
Tar Acids, polyalkylphenol fraction (CAS No. 84989-05-9)	Not Established	Not Established	Not Established	No	30 – 45 %
Acetic Acid (CAS No. 64-19-7)	10 ppm, 25 mg/m ³ (8-hr TWA)	10 ppm, 25 mg/m ³ (8-hr TWA)	10 ppm, 25 mg/m ³ (TWA) (EH40 OES) 15 ppm, 37 mg/m ³ (STEL) (EH40 OES) 10 ppm, 25 mg/m ³ (TWA) (EU ELV)	No	20 – 30 %
Benzenesulfonic Acid, mono-C ₁₀₋₁₄ -alkyl derivs. (CAS No. 85117-49-3)	Not Established	Not Established	Not Established	No	20 – 30 %
p-Cresol (CAS No. 106-44-5)	5 ppm, 22 mg/m ³ (8-hr TWA)	5 ppm, 22 mg/m ³ (8-hr TWA)	Not Established	No	1 – 5 %
m-Cresol (CAS No. 108-39-4)	5 ppm, 22 mg/m ³ (8-hr TWA)	5 ppm, 22 mg/m ³ (8-hr TWA)	5 ppm, 22 mg/m ³ (TWA) (EU ELV)	No	1 – 5 %
o-Cresol (CAS No. 95-48-7)	5 ppm, 22 mg/m ³ (8-hr TWA)	5 ppm, 22 mg/m ³ (8-hr TWA)	5 ppm, 22 mg/m ³ (TWA) Skin Designation: Can be absorbed through the skin. (EH40 OES) 5 ppm, 22 mg/m ³ (TWA) (EU ELV)	No	0 – 2 %
2,4-Xylenol (CAS No. 105-67-9)	Not Established	Not Established	Not Established	No	0 – 2 %
2,5-Xylenol (CAS No. 95-87-4)	Not Established	Not Established	Not Established	No	0 – 2 %
Phenol (CAS No. 108-95-2)	Not Established	Not Established	Skin Designation: Can be absorbed through the skin. (EH40 OES) 2 ppm, Skin Designation: Can be absorbed through the skin. (EH40 MEL) 2 ppm, 7,8 mg/m ³ (EU ELV)	No	0 – 2 %

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

3. HAZARDS IDENTIFICATION

Health Effects

- Eyes: This product is toxic and may cause headache, nausea or burn. Danger of serious damage to health by prolonged exposure.
- Skin: This product is toxic and will cause burns. Danger of serious damage to health by prolonged exposure.
- Inhalation: This product is toxic and may cause headache, nausea or burn. Danger of serious damage to health by prolonged exposure.
- Ingestion: This product is toxic and may cause headache, nausea or burn. Danger of serious damage to health by prolonged exposure.

Physical Properties

- Appearance: Clear, dark brown liquid.
- Odor: Acidic.

Unusual Fire, Explosion, and Reactivity Hazards

None known.

4. FIRST AID MEASURES

Have the product container, label, or Material Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment. **FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL 1-800-498-5743 (U.S. Medical Emergencies) or 1-651-523-0318 (International Medical Emergencies, Collect Calls will be accepted).**

- Ingestion: Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting. Rinse mouth with water. If possible drink milk afterwards. Do not give anything by mouth to an unconscious person.
- Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice.
- Skin Contact: Take off contaminated clothing immediately. Thoroughly swab with a 70:30 mixture of glycerol:methylated spirits. Wash off immediately with soap and water. Wash contaminated clothing before reuse. Call a poison control center or doctor immediately for treatment advice.
- Inhalation: Move person to fresh air. If person is not breathing, call **911** or an ambulance, and then give artificial respiration, preferably mouth-to-mouth, if possible. If breathing is difficult, give oxygen. Call a poison control center or doctor immediately for treatment advice.

Notes to Physician

Symptoms: headache, nausea, burn.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

- Flash Point (Test Method): 58° C
- Flammable Limits (% in Air): Lower: % Not Applicable Upper: % Not Applicable
- Autoignition Temperature: Not Available
- Flammability: Not Flammable
- Extinguishing Media: Fog or Water Spray, Foam, Dry Chemical

Hazardous Decomposition Products:

Hazardous gases/vapors produced are sulfur dioxide, carbon monoxide, and carbon dioxide.

Unusual Fire, Explosion, and Reactivity Hazards

None known.

In Case of Fire

Evacuate personnel to a safe area. Wear self-contained breathing apparatus and full protective equipment.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Wear appropriate personal protective equipment during cleanup. Keep people away from and upwind of spill/leak.

Small Spills: Prevent material from entering sewers, waterways, or low areas.

Large Spills: Absorb into inert material (sawdust, sand, silica gel, acid binder, or universal binder) and place in plastic or plastic-lined containers for proper disposal. Flush away traces with water.

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

7. HANDLING AND STORAGE

Store the material in original container, in a secure area out of reach of children and domestic animals. Keep container tightly closed and in a dry, cool place out of direct sunlight. Protect from contamination. Avoid inhalation. Avoid contact with eyes, skin, or clothing. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING, AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Ingestion: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

Eye Contact: Wear chemical splash goggles and a face shield.

Skin Contact: Wear impervious clothing and a chemical-resistant apron.

Inhalation: Use only in area with appropriate exhaust ventilation. Wear a NIOSH/MSHA-approved pesticide respirator with an organic vapor cartridge and pesticide pre-filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, dark brown liquid
Odor:	Acidic
Boiling Point:	Not Available
Specific Gravity:	1.05 g/mL
Bulk Density:	8.72 – 8.80 lbs/gal
pH:	2.0-2.4
Solubility in H ₂ O:	Emulsifiable
Vapor Pressure:	Not Established
Percent Volatile:	Not Available
Evaporation Rate:	Not Available

Note: The physical data presented here are typical values based on material tested, but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

Stability:	Stable under normal use and storage conditions.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Avoid heat and exposure to sunlight.
Materials to Avoid:	Incompatible with strong bases, oxidizing agents, hypochlorite and sodium hydroxide.
Hazardous Decomposition Products:	Hazardous gases/vapors produced are sulfur dioxide, carbon monoxide, and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies

Ingestion:	<u>Acute Toxicity</u> Oral (LD ₅₀ Rat) :	317 mg/kg (Phenol)
Dermal:	<u>Acute Dermal Effects</u> Dermal (LD ₅₀ Rat) :	850 mg/kg (Phenol)
Inhalation:	<u>Acute Inhalation Effects</u> Inhalation (LC ₅₀ Rat, 1hr) :	0.316 mg/L (Phenol)
Eye Contact:	Corrosive.	
Skin Contact:	Corrosive.	
Skin Sensitization:	Not a skin sensitizer (corrosive).	

Carcinogenicity

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. Do not discharge effluent containing this product directly to water. Do not contaminate water when disposing of equipment wash water.

Eco-Acute Toxicity

Daphnia Magna, 48-hour EC₅₀: 35 mg/L

13. DISPOSAL CONSIDERATIONS

Container Disposal

Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For containers 1 gallon or less: Do not reuse empty container (bottle, can, bucket). Wrap container and put in trash.

Pesticide Disposal

Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

14. TRANSPORT INFORMATION

DOT Classification (for container sizes 20 – 200 liter)

Proper Shipping Name:	Corrosive Liquid, Toxic, N.O.S. (Tar Acids, Polyalkylphenol Fraction)
Hazard Class:	8
UN Number:	2922
Packing Group:	II
Label:	8, 6.1
Special Instructions:	Not Applicable

DOT Classification (for container sizes 4x1 gallon)

Proper Shipping Name: Corrosive Liquid, Toxic, N.O.S. (Tar Acids, Polyalkylphenol Fraction)
Hazard Class: 8
UN Number: 2922
Packing Group: II
Label: 8, 6.1
Special Instructions: Not Applicable

IMDG Classification (for container sizes 20 – 200 liter)

Proper Shipping Name: Corrosive Liquid, Toxic, N.O.S. (Tar Acids, Polyalkylphenol Fraction)
Hazard Class: 8
UN Number: 2922
Packing Group: II
Label: 8, 6.1
Special Instructions: Not Applicable

IMDG Classification (for container sizes 4x1 gallon)

Proper Shipping Name: Corrosive Liquid, Toxic, N.O.S. (Tar Acids, Polyalkylphenol Fraction)
Hazard Class: 8
UN Number: 2922
Packing Group: II
Label: 8, 6.1
Special Instructions: Not Applicable

IATA Classification (for container sizes 20 – 200 liter & 4x1 gallon)

Proper Shipping Name: Corrosive Liquid, Toxic, N.O.S. (Tar Acids, Polyalkylphenol Fraction)
Hazard Class: 8
UN Number: 2922
Packing Group: II
Label: 8, 6.1
Special Instructions: Not Applicable

Canadian Classification (for container sizes 20 – 200 liter)

Proper Shipping Name: Corrosive Liquid, Toxic, N.O.S. (Tar Acids, Polyalkylphenol Fraction)
Hazard Class: 8
UN Number: 2922
Packing Group: II
Label: 8, 6.1
Special Instructions: Not Applicable

Canadian Classification (for container sizes 4x1 gallon)

Proper Shipping Name: Corrosive Liquid, Toxic, N.O.S. (Tar Acids, Polyalkylphenol Fraction)
Hazard Class: 8
UN Number: 2922
Packing Group: II
Label: 8, 6.1
Special Instructions: Not Applicable

15. REGULATORY INFORMATION

EPA SARA Title III Hazard Classification

Immediate Y Fire N Sudden Release of Pressure N
Delayed N Reactive N

Section 313 Toxic Chemicals

Not Listed

California Proposition 65

Not Listed

CERCLA/SARA 302 Reportable Quantity (RQ)

Not Listed

RCRA Hazardous Waste Classification (40 CFR 261)

Not Listed

16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 1
Instability: 0

HMIS Hazard Ratings

Health: 2
Flammability: 1
Reactivity: 0

0 - Minimal
1 - Slight
2 - Moderate
3 - Serious
4 - Extreme

For Non-Emergency Questions About This Product Call:

1-800-621-8829

Neogen Corporation

Lexington, KY

www.Hacco.com

Original Issue Date: February 10th, 2009

Revision Date: Not Applicable

Replaces: Not Applicable

BioSentry[®] is a Registered Trademark of Neogen Corporation.

FarmFluid S[™] is a Trademark of Neogen Corporation.

ALTHOUGH THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN (HEREINAFTER "INFORMATION") ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE CORRECT, HACCO, INC., THE MANUFACTURER OR THE SELLER MAKES NO REPRESENTATIONS AS TO THE COMPLETENESS OR ACCURACY THEREOF. INFORMATION IS SUPPLIED UPON THE CONDITION THAT THE PERSONS RECEIVING IT WILL MAKE THEIR OWN DETERMINATION AS TO ITS SUITABILITY FOR THEIR PURPOSES PRIOR TO USE.

THE PRODUCT COVERED BY THIS INFORMATION SHEET IS FURNISHED "AS IS" BY HACCO, INC., THE MANUFACTURER OR THE SELLER, AND IS SUBJECT ONLY TO THE WARRANTIES, IF ANY, THAT APPEAR ON THE PRODUCT'S LABEL OR ARE OTHERWISE EXPRESSLY PROVIDED HEREIN.

EXCEPT AS EXPRESSLY PROVIDED ON THE PRODUCT'S LABEL OR OTHERWISE PROVIDED HEREIN, NO WARRANTIES, GUARANTEES, OR REPRESENTATIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, ARE MADE BY HACCO, INC., THE MANUFACTURER OR THE SELLER WITH REGARD TO THE PRODUCT OR USE OF THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE.

EXCEPT AS EXPRESSLY STATED HEREIN, HACCO, INC., THE MANUFACTURER OR THE SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED BY USE OF THE PRODUCT COVERED BY THIS INFORMATION. BUYER'S OR USER'S EXCLUSIVE REMEDY, AND THE TOTAL LIABILITY OF HACCO, INC., THE MANUFACTURER OR THE SELLER, SHALL BE LIMITED TO DAMAGES NOT EXCEEDING THE COST OF THE PRODUCT. NO AGENT OR EMPLOYEE OF HACCO, INC., THE MANUFACTURER OR THE SELLER IS AUTHORIZED TO AMEND THE TERMS OF THIS WARRANTY DISCLAIMER OR THE PRODUCT'S LABEL OR TO MAKE A REPRESENTATION OR RECOMMENDATION DIFFERENT FROM OR INCONSISTENT WITH THE LABEL OF THIS PRODUCT.

IN NO EVENT SHALL HACCO, INC., THE MANUFACTURER OR THE SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE, HANDLING, APPLICATION, STORAGE OR DISPOSAL OF THIS PRODUCT OR FOR DAMAGES IN THE NATURE OF PENALTIES AND THE BUYER AND USER WAIVE ANY RIGHT THEY MAY HAVE TO SUCH DAMAGES.