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MSDS

P.O. Box 329 - 802 Washington Avenue Chestertown, MD 21620 - USA

MATERIAL SAFETY DATA SHEET

TELEPHONE # FOR INFORMATION 410 778-3100

24 HOUR EMERGENCY NUMBER (CHEM-TEL): USA, Canada, Puerto Rico 800-255-3924;

595000

Outside North American Continent 813-248-0585 (call Collect)

1. Product Identification

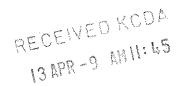
Product Code: 2221

Product Description: Duplex Indicator

Manufactured By: LaMotte Company

802 Washington Avenue Chestertown, MD 21620

2. Composition/Information On Ingredients						
Hazard	CAS#/Name	*/ ₆	PEL	TLV		
Yes	64-17-5 Ethyl Alcohol	29	1000ppm TWA (1900 mg/m³)	1000 ppm TWA		
Yes	67-56-1 Methyl Alcohol	2	200ppm TWA (260 mg/m³)	200 ppm TWA		
Yes	76-59-5 Bromthymol Blue	<0.1	None Established	None Established		
Yes	493-52-7 Methyl Red	<0.1	None Established	None Established		
No	7732-18-5 Water	to 100%	None Established	None Established		



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Product Code: 2221

Product Description: Duplex Indicator

3. Hazards Overview

Primary Route Of Entry: Skin Ingestion Inhalation

Vapors and liquid harmful. Inhalation can cause headache, dizziness, nausea. May be irritating to eyes and skin. Harmful if swallowed: Ingestion may be fatal or cause blindness.

HMIS Hazard

Scale: 4 = Extreme, 3 = High, 2 = Moderate, 1= Slight, 0 = Least

Health:

Flammability: 2

Reactivity: 0

Carcinogenicity: None:

Other Health Related Comments:

See section 11, Toxicity

4. First Aid Measures

Eye Contact: Flush thoroughly with water for 15 minutes, ocassionally lifting upper and lower eyelids. Contact physician, if

irritation nercicto

Skin Contact: Flush with water for 15 minutes while removing affected clothing. Contact physician if irritation persists. Wash

clothing prior to reuse.

Ingestion: Induce vomiting as directed by medical personnel. Contact physician immediately.

Inhalation: Remove to fresh air.

5. Fire Fighting Measures

Flash Point (Method Used): 22 deg C-closed cup LEL: 3.3% UEL: 19%

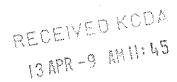
Extinguishing Media: Dry chemical, CO2, or water spray

Special Fire Fighting Procedures: N/A

Unusual Fire & Explosion Hazard: Vapors may travel distance to ignition source and flash back.

6. Accidental Release Measures

Eliminate sources of ignition. Ventilate area. Absorb spill on inert material, containerize, and hold for disposal. Dispose according to federal, state, and local regulations.



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Product	Code:	2221

Product Description: Duplex Indicator

7. Handling & Storage

Store in cool, dry place away from incompatible materials. Do not use near heat or flame.

8. Exposure Controls/Personal Protection

Ventilation

Mechanical

Protection When Handling

Eye Protection Gloves Lab Coat

Work/Hygenic Practices:

Use with adequate ventilation and avoid contact with skin and eyes.

9. Physical & Chemical Properties

Appearance:

Dark Green Liquid

Solubility In Water: Soluble

Odor:

Alcohol

pH:

N/A

Vapor Density:

1.6 (Air=1) for ethanol

Vapor Pressure:

40@19C for Ethanol

Boiling Point:

78C for Ethanol

Melting Point:

-114C for Ethanol

10. Stability & Reactivity

Stable:

Yes

Conditions To Avoid:

Heat, sources of ignition

Incompatibility (Materials To Avoid):

Contact with nitric acid or other strong oxidizers

Hazardous Decomposition Products:

COx may form when heated to decomposition.



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Product Code: 2221	Product Description:	Duplex Indicator
11. Toxicological Information Oral Rat LD 50: 7060 mg/kg Ethanol; 5628 mg/kg	g Methanol.	
Target Organs: Skin		
12. Ecological Information Information Not Yet Available		
13. Disposal Considerations Dispose according to federal, state, and local regulations	lations.	
14. Transportation Information	- Andrews	
Proper Shipping Name: DOT: ETHANOL		
IATA: ETHANOL Hazard Class/Div:		
DOT: 3 IATA: 3 UN: 1170 Packing Group: II		

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Product	Code:	2221
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Product Description: Duplex Indicator

15. Regulatory Information **Chemical Inventory Status** --- Canada ---USA Europe Australia Japan NDSL DSL **TSCA** EC Ingredient Hazard Yes Yes Yes No Yes Yes 64-17-5 Yes Ethanol Yes Yes Yes No Yes Yes 67-56-1 Yes Methyl Alcohol No Yes No Yes Yes Yes 76-59-5 Yes Bromthymol Blue Yes Yes Yes No Yes Yes 493-52-7 Yes Methyl Red Yes Yes No Yes Yes Yes 7732-18-5 No Distilled Water Federal, State, & International Regulations

	SAI	RA 302		SARA 313		RCRA	TSCA
Ingredient	RQ	TPQ	Listed	Chemical Category	CERCLA	261.33	8(D)
64-17-5 Ethanol	No	No	No	No	No	No	No
67-56-1 Methyl Alcohol	No	No	Yes	Toxic Pollutant	5000	U154	No
76-59-5 Bromthymol Blue	No	No	No	No	No	No	No
493-52-7 Methyl Red	No	No	No	No	No	No	No
7732-18-5 Distilled Water	No	No	No	No	No	No	No

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Product Code: 2221 Product Description: Duplex Indicator

Ingredient	Acute	Haza	rd Ca	1/312 tegories Pressure	Reactivity	Austral Hazchem Code	Poison	This MSDS Is WHMIS Compliant
64-17-5 Ethanol	Yes	Yes	Yes	No	No	None Allocated	None Allocate	đ
67-56-1 Methyl Alcohol	Yes	Yes	Yes	No	No	2PE	S6	
76-59-5 Bromthymol Bl	Yes ue	No	No	No	No	None Allocated	None Allocate	d
493-52-7 Methyl Red	No	No	No	No	No	None Allocated	None Allocate	d
7732-18-5 Distilled Water	No 1	No N	io N	9	No	None Allocated	None Allocate	d
product 2221 as a whole	Yes	Yes	Yes	No	No .	2[S]E	S5	Yes

16. Other Information

Keep out of reach of children.

Prepared By: Regulatory Affairs Department

Revised: 7/26/2009