MATERIAL SAFETY DATA SHEET (Compiles with OSHA CFR 1910.1200, ANSI Z 400.1-1993)

Safer Soap

SECTION 1: Chemical Product & Company Identification

Product Name(s): Safer® Brand Insecticidal Soap Concentrate

MSDS Number: 5122 EPA Number: 42697-1

Manufacturer Name & Address: RINGER CORPORATION 9555 James Avenue S., Suite 200, Bloomington, MN 55431

Telephone Contact Number & Hours of Operation: (612) 703-3300, 8:00 a.m. - 5:00 Central Time

Emergency Telephone Contact Number: 1-800-228-5635, ext. 170

SECTION 2: Composition/Information on Ingredients

	% by	OSHA	PEL	ACGIH	TLV
Hazardous Ingredients*	weight CAS No.	TWA	STEL	TWA	STEL
ethyl alcohol	< 35.0 64-17-5	1900 mg/m ³	NE	1880 mg/m3	NE
methyl alcohol	< 2.0 67-56-1	260 mg/m ³	NE	262 mg/m3	328 mg/m ³
Potassium Salts of Fatty Acids	< 50.0 N/A	NE	NE	NE	NE

^{*} all ingredients in quantities > 1.0 % (0.1 % for carcinogens or teratogens) that are potentially hazardous per OSHA definitions N/A = not applicable NE = not established

SECTION 3: Hazards Identification

EMERGENCY OVERVIEW

Physical description: Amber liquid

Odor: alcohol and lard odor

Potential Health Effects: This material may be severely irritating to both eyes and skin. Personnel responding to a spill should wear protective clothing and eye protection.

SECTION 4: First Aid Measures

Skin Contact: Wash with plenty of soap and water. Get medical attention if irritation persists.

Ingestion: If swallowed, promptly drink large amounts of water. Never give liquids to an unconscious person. Get medical attention.

Eye Contact: Hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get medical attention.

Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

NOTES TO PHYSICIAN: The range of toxicity for methanol ingestion is extremely variable. Blood levels of methanol and degree of scidemia are more indicative of risk. Visual changes have been described, and may be delayed for 12 to 24 hours. Funduscopic findings may be normal but also may show peripapillary edema, hyperemia of the optic disc or retinal edema.

SECTION 5: Fire Fighting Measures

Extinguishing media: alcohol foam

Hazardous products of combustion: not determined

Special Fire Fighting Measures: water stream may spread fire

Flashpoint: < 72°F TCC

Autoignition temperature: not applicable

NFPA Ratings: Health = 2 Fire = 3 Reactivity = 0

SECTION 6: Accidental Release Measures

Spills: Rinse with abundant water and mop up (See Disposal Comments in Section 13)

SECTION 7: Handling & Storage

Storage: Store away from heat, out of reach of children. Do not contaminate water, food or feed by storage or disposal. Do not reuse container.

SECTION 8: Exposure Controls & Personal Protective Equipment

Skin: Protective gloves (nitrile) recommended

Eye Protection: Recommended to avoid splashing of material directly into eyes

Respiratory: In typical applications no engineering controls should be needed; if industrial hygiene surveys show that occupational exposure limits may be exceeded, use NIOSH approved respirator with organic vapor/dust/mist cartridges

SECTION 9: Physical & Chemical Parameters

Appearance: Amber liquid

Physical state: liquid Bulk Density: 0.93

Vapor pressure: not determined Boiling point: 80°C (176°F) Odor: alcohol and lard odor

Solubility in water: nearly complete

pH: 10.6-10.8

Vapor density: not determined Freezing point: not determined

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SECTION 10: Stability & Reactivity

Stability: stable

Conditions to avoid: heat and open flame

Incompatibilities: Concentrated mineral supplements (fertilizers), strong oxidizers, acids

Hazardous polymerization: will not occur

SECTION 11: Toxicological Information

Oral LD_m = > 5,000 mg/kg

Dermal LD_m = > 2,000 mg/kg

Not a contact sensitizer

Carcinogens: None listed per OSHA, NTP, or IARC

Ethanol has been shown to be a developmental toxin from chronic ingestion; such effects are not anticipated from appropriate use of this product.

SECTION 12: Ecological Information

Ecotoxicity: May be hazardous to aquatic invertebrates. Do not apply directly to water; do not contaminate water by cleaning of equipment or disposal of washwaters.

Environmental Fate: No data available

SECTION 13: Disposal Considerations

Be aware that the waste owner has responsibility for final disposal. Regulations may also apply to empty containers, liners or rinsate. Laws may change or be reinterpreted; state and local regulations may be different from federal regulations. This information applies to materials as manufactured; contamination or processing may change waste characteristics and requirements.

SECTION 14: Transport Information

DOT Hazard Description: Consumer Commodity, ORM-D

SECTION 15: Regulatory Information

SARA Title III: reporting not required unless TPQ exceeded in inventory

Individual States: States such as Pennsylvania, New Jersey, California, Vermont, Massachusetts and Rhode Island may all have components of this product listed; consult specific state regulatory requirements for additional information.

SECTION 16: Other Information

For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIH) documentation of TLV's (Threshold Limit Values) for individual components and the DOT Emergency Response Guidebook.

This information is provided in good faith, but without express or implied warranty.