



Ecolab Center
St. Paul, Minnesota 55102

58608 MATERIAL SAFETY DATA SHEET Page 1 of 2
MEDICAL EMERGENCIES ONLY (24 Hour Service): 1-800-328-0026
Medical Calls from Outside of the USA: 1-651-222-5352

ECOLAB FOOD & BEVERAGE DIVN.

Ecolab Center St. Paul MN 55102

Product Information: 1-800-392-3392

Issue Date: June 21, 1999

1.0 IDENTIFICATION /

1.1 Product Name: DUO

1.2 Product Type: Iodine Teat Dip

1.3 Hazard Rating: Health: 1 Fire: 0 Reactivity: 0

Substances Subject to SARA 313 Reporting Are Indicated by "#"

2.0 HAZARDOUS COMPONENTS /		(mg/m3)
	CAS No.	% PEL TWA
2.1 Nonylphenol ethoxylate	9016-45-9	4 No No
2.2 Also contains less than 1% complexed iodine. The OSHA ceiling limit for iodine in air is 1 mg/m3.		

PEL = OSHA 8 hour average in air

TWA = ACGIH 8 hour average in air

3.0 PHYSICAL DATA /

3.1 Appearance: Opaque brown liquid

3.2 Solubility in Water: Mixes with water in all proportions

3.3 pH: 3.5 - 4.0 (100%)

3.4 Initial Boiling Point: >212 deg F

3.5 Specific Gravity: 1.016 @ 68 deg F

4.0 FIRE AND EXPLOSION DATA /

4.1 Special Fire Hazards: None

4.2 Fire Fighting Methods: Does not support combustion.

5.0 REACTIVITY DATA /

5.1 Stability: Stable under normal conditions of handling.

5.2 Conditions to Avoid: Use as supplied. Do not mix with other products or water. In particular, do not mix with chlorinated detergents or sanitizers - will cause hazardous vapors.

6.0 SPILL OR LEAK PROCEDURES / USE PROPER PROTECTIVE EQUIPMENT

6.1 Cleanup: Dike or dam large spills, soak up on inert absorbent or pump to suitable containers. Neutralize residual iodine with sodium thiosulfate or sodium sulfite. Flush residue to sewer with plenty of water.

6.2 Waste Disposal: Consult state/local authorities for limits on chemical waste disposal.



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Ecolab Inc.

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7.0 HEALTH HAZARD DATA /

CAUTION

7.1 Effects of Overexposure to Concentrate:

Eyes: Causes irritation.

If Swallowed: May cause irritation, nausea, stomach distress.

8.0 FIRST AID /

8.1 Eyes: Flush immediately with plenty of cool running water. Remove contact lenses, if used, and flush again.

8.2 If Swallowed: Rinse mouth; then drink 1 or 2 large glasses of water. DO NOT induce vomiting. Never give anything by mouth to an unconscious person.

IF IRRITATION OR DISCOMFORT PERSISTS, CALL A PHYSICIAN.

9.0 PROTECTIVE MEASURES /

9.1 Eyes: Eye protection is recommended.

10.0 ADDITIONAL INFORMATION /

10.1 Avoid contact with food.

10.2 Purpose of 7/14/1999 issue: QC and editorial update. Replaces April 6, 1998 issue.

KEEP OUT OF REACH OF CHILDREN

The above information is believed to be correct with respect to the formula used to manufacture the product. As data, standards and regulations change, and conditions of use and handling are beyond our control, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE AS TO THE COMPLETENESS OR CONTINUING ACCURACY OF THIS INFORMATION.