

MATERIAL SAFETY DATA SHEET

According to EC Directive 2001/58/EC

1. Identification of the Substances or Preparation and of the Company

1.1 Identification of preparation: **Liquid Formula 90**

1.1.2 Date of Revision: June 3, 2009

1.1.3 Use of preparation: Cleaning Agent

1.2 Company identification:

Chemspec Europe

Unit 36C, Tong Park

Otley Road, Baildon

West Yorkshire BD17 7QD UK

Tel: 01274 597333

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1.3 Emergency telephone number, official advisory bodies:

1.3.1 For medical emergency call Chemtrec at 00-1-703 527-3887.

2. Composition/Information on Ingredients

2.1 Chemical Description: Chelator, surfactant, fragrance, dye.

2.2 Hazardous Ingredients:

Chemical Name	%	CAS-No.	EC#	Hazard Symbol	R-Phrases
Chelating Agent	5-10%	Mixture	Unlisted	Xi	36,38
Disodium dodecyldiphenyl ether disulfonate	25-30%	28519-02-0	249-063-8	Xi	36,38
Alcohols (C12-15) Ethoxylate	15-20%	68131-39-5	500-195-7	Xi	36,38
Ethoxylated Alcohol	1-5%	160875-66-1	605-233-7	Xi	36,38

3. Possible Hazards

3.1 For humans: May cause eye and skin irritation.

3.2 For environment: None known.

4. First Aid Measures

4.1 Inhalation: Remove to fresh air. If symptoms persist consult physician.

4.2 Eye contact: Remove contact lenses. Flush with water for at least 15 minutes.

4.3 Skin contact: Thoroughly wash exposed skin with soap and water. Remove any contaminated clothing.

4.4 Ingestion: Drink plenty of water. Consult physician.

4.5 Physician: Treatment based on judgment of attending physician.

5. Fire Fighting Measures

5.1 Suitable extinguishing media: Water, alcohol foam, carbon dioxide, or dry chemical.

5.2 Unsuitable extinguishing media: None known.

5.3 Special exposure hazards: Possibly oxides of carbon and other unidentified compounds.

5.4 Special safety equipment: Self-contained positive pressure breathing apparatus and protective clothing.

6. **Accidental Release Measures**

6.1 Personal precautions: Prevent eye and skin contact.

6.2 Environmental precautions: Dispose of according to local regulations.

6.3 Methods of cleaning up: Use absorbent material to soak up spills. Sweep up and dispose of according to local regulations.

7. **Handling and Storage**

7.1 Handling: Prevent eye and skin contact.

7.2.1 Storage: Keep container closed to avoid contamination.

7.2.2 Incompatible storage: None known

7.2.3 Other: None known.

8. **Exposure Controls/Personal Protection**

Please use common sense when handling this product.

8.1 Respiratory protection: Use local exhaust or dilution ventilation.

8.2 Hand protection: Chemical resistant gloves.

8.3 Eye protection: Safety glasses or safety goggles.

8.4 Skin protection: Use body-covering clothing.

8.5 Working hygiene: Take usual precautions when handling.

9. **Physical and Chemical Properties**

9.1.1 Appearance: Clear thick liquid

9.1.2 Color: Blue

9.1.3 Odor: Roto Brite

9.2 pH: 13.0 – 14.0

9.3 Boiling point/boiling range: n. av.

9.4 Specific Gravity: 1.080 g/cc

9.5 Wt/Gal: 9.00 lbs/gal

9.6 Solubility in water: Complete

9.7 % VOC: <5%

9.8 Flash point: n. av.

9.9 Inflammation: n. av.

10. **Stability and Reactivity**

10.1 Conditions to avoid: None known.

10.2 Materials to avoid: Strong-oxidizing agents and strong acids

10.3 Hazardous decomposition of materials: See point 5.3.

11. **Toxicological Information**

11.1 Acute toxicity:

Chelating Agent: LD50 dermal rabbit: >5000 mg/kg.

Ethoxylated Alcohol: >500 mg/kg.

11.2 Acute oral toxicity:

Chelating Agent: LD50 oral rat: 3030 mg/kg.

Alcohols (C12-15) Ethoxylate: LD50 oral rat: >500-5000 mg/kg.

- 11.3 Chronic effects: n. av.
- 11.4 Sensitization: n. av.
- 11.5 Carcinogenicity: n. ap.
- 11.6 Mutagenicity: n. av.
- 11.7 Reproductive toxicity: n. av.
- 11.8 Narcotic effects: n. av.

12. **Ecological Information**

- 12.1 Water-Hazard class: None (U.S.)
- 12.2 Biodegradability: May not be completely biodegradable
- 12.3 Bioaccumulation: n. av.
- 12.4 Aquatic toxicity:
 - Chelating Agent: LC50 fish: >100 mg/L. LC50 fathead minnow: >100 mg/L.
 - Ethoxylated Alcohol: EC50 daphnia magna (48hr): 10-100 mg/L.
 - EC50 green algae (72hr): 10-100 mg/L.
- 12.5 Other relevant ecological information: Small quantities considered to be harmless.

13. **Disposal**

- 13.1 Refer to local regulations.

14. **Transport Information**

All ingredients used in this formula are non-regulated for non-bulk.

15. **Regulations**

- 15.1 Symbol: Xi: Irritant



- 15.2 R-Sentences:
 - R36/37/38: Irritating to eyes, respiratory system and skin.
- 15.3 S-Sentences:
 - S2: Keep out of reach of children.
 - S24/25: Avoid contact with skin and eyes.
 - S37/39: Wear suitable gloves and eye/face protection.

16. **Other Information**

DISCLAIMER OF LIABILITY

The manufacturer and seller warrants that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the

hazards connected with the use of the material and the results to be obtained from the use thereof.

n. ap. = not applicable

n. av. = not available