

**MATERIAL SAFETY DATA SHEET – USA VERSION****Surfzyme HD Diluted (Ready to Use)****1. IDENTIFICATION OF SUBSTANCE/PREPARATION & THE COMPANY****PRODUCT NAME:** Surfzyme HD Diluted (Ready to Use)**PART NUMBER:****MANUFACTURER:** ZYMO USA Inc.  
PO Box 9240  
Fleming Island, FL 32006  
Tel: (00)-1-904-213-7994  
Fax: (00)-1-206-350-2871**2. COMPOSITION / INFORMATION ON INGREDIENTS**

<b>INGREDIENT NAME:</b>	<b>CAS No.:</b>	<b>CONTENT:</b>	<b>SYMBOL:</b>	<b>RISK:</b>
Proprietary Surfactant	Mixture	NA	-	None

**3. HAZARDS IDENTIFICATION**

Not classified – Not expected to be harmful – repeated and extended exposure may cause a temporary irritation of the skin and eyes. The available data does not report any human health hazards.

**4. FIRST AID MEASURES****INHALATION:** No specific first aid measures are required. If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or medical discomfort occurs.**INGESTION:** No specific first aid measures are required. Promptly get affected personnel to drink large volumes of water to dilute the swallowed chemical. DO NOT induce vomiting. Get medical attention immediately.**SKIN:** No specific first aid measures are required. Promptly wash any contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above or discard. Get medical attention promptly if symptoms occur after washing.**EYES:** No specific first aid measures are required. As a precaution remove any contact lenses, if worn. Promptly flush eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.

**5. FIRE FIGHTING MEASURES**

**EXTINGUISHING MEDIA:** This material is not combustible. Use extinguishing media appropriate for surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** No specific fire fighting procedure given.

**UNUSUAL FIRE & EXPLOSION HAZARDS:** No unusual fire or explosion hazards noted.

**HAZARDOUS COMBUSTION PRODUCTS:** Highly dependent on combustion conditions. Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Oxides of: Nitrogen and unidentified organic compounds will be evolved – inhalation could be dangerous.

**PROTECTIVE MEASURES IN FIRES:** As in any fire, wear an approved, positive-pressure, self-contained breathing apparatus and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES:**

**PERSONAL PRECAUTION IN SPILL:** Wear appropriate protective equipment (see Section 8)

**SPILL CLEANUP METHODS:** Collect for reclamation or absorb in vermiculite, dry sand or similar material. Flush clean with lots of water. Be aware of potential for surfaces to become slippery. Flush to sewer if local regulations permit.

**7. HANDLING AND STORAGE**

**USAGE PRECAUTIONS:** Do not freeze. Store product at ambient temperature. Container must be kept tightly closed. Follow label instructions. Wash thoroughly after handling.

**USAGE DESCRIPTION:** Degreasing solution.

**STORAGE PRECAUTIONS:** Store above freezing. Keep containers tightly closed.

**8. EXPOSURE CONTROLS, PERSONAL PROTECTION**

**PROTECTIVE EQUIPMENT:**  

**VENTILATION:** No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

**RESPIRATORS:** No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

**PROTECTIVE GLOVES:** Use gauntlet type rubber gloves.

**EYE PROTECTION:** Wear approved chemical safety goggles where eye exposure is reasonably probable.

**OTHER PROTECTION:** Wear rubber apron. Provide eyewash station.

**HYGIENIC WORK PRACTICES:** Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes wet or contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>APPEARANCE:</b>	Liquid.	
<b>COLOUR:</b>	Light yellow	
<b>ODOR/TASTE</b>	Mild	
<b>SOLUBILITY IN WATER:</b>	Soluble	
<b>BOILING POINT (°C, interval):</b>	>100 °C	<b>PRESSURE:</b> 760mmHg
<b>pH VALUE, 5% SOLUTION:</b>	approx. 6.5	
<b>FLASH POINT (°C):</b>	>100 °C	<b>METHOD:</b> PM Closed cup.
<b>DENSITY/SPECIFIC GRAVITY (g/mL):</b>	1.00	<b>TEMPERATURE (°C):</b> 15

**10. STABILITY AND REACTIVITY**

**STABILITY:** Normally stable under ambient and anticipated storage and handling conditions of temperature and pressure.

**CONDITIONS TO AVOID:** Avoid frost or freezing temperatures.

**HAZARDOUS POLYMERIZATION:** Will not polymerize.

**MATERIALS TO AVOID:** No incompatible groups noted.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Incomplete combustion and thermolysis can liberate gases such as Carbon dioxide (CO<sub>2</sub>), Carbon monoxide (CO), Oxides of: Nitrogen and Sulphur.

**11. TOXICOLOGICAL INFORMATION**

**TOXICOLOGICAL INFORMATION:** None known

**TOXIC DOSE – LD 50:** >5000 mg/kg (oral rat)

**SKIN:** May cause slight skin irritation.

**EYES:** May cause slight eye irritation.

**12. ECOLOGICAL INFORMATION**

**ECOLOGICAL INFORMATION:** No data on possible environmental effects have been found. No short term or long term effect on the environment is expected.

**DEGRADABILITY:** Biodegradable. No data on the used product saturated with grease or lubricants.

**13. DISPOSAL CONSIDERATIONS**

**DISPOSAL METHODS:** Recover and reclaim or recycle, if practical. Dispose of in accordance with Local Authority requirements. Confirm disposal procedures with environmental engineer and in accordance with local regulations.

**14. TRANSPORT INFORMATION**

**GENERAL:** Not regulated for any mode of transport.

**ROAD TRANSPORT:**  
**UN No. ROAD:** 0

**15. REGULATORY INFORMATION**

In accordance with the directive 1999/45/EC and 2001/58/EC

**LABEL FOR SUPPLY:** None  
**RISK PHRASES:** None  
**SAFETY PHRASES:** None

**16. OTHER INFORMATION**

**USER NOTES:** To the best of our knowledge, the information contained herein is accurate. However, neither ZYMO USA Inc.. nor any of its subsidiaries or agents assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

**DATE:** October 17, 2007  
**PRINTING DATE:** October 24, 2007