

## Electronics Tdg & Mfg Co., Ltd

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DEGREE OF  
HAZZARD

4=SEVERE  
3=SERIOUS  
2=MODERATE  
1=SLIGHT  
0=MINIMAL

**HEALTH**

**1**

**FLAMMABILITY**

**0**

**REACTIVITY**

**0**

**PERSONAL PROTECTION**

**B**

## Material Safety Data Sheet (MSDS)

EPA Verified

### Smart Sonic's 440-R<sup>®</sup> SMT Detergent

#### EMERGENCY TELEPHONE

1(818) 707-3110 Westlake Village, CA U.S.A.

See Page 2 for Personal Protection

Date: January 1, 2007 Rev. 8.2

## PRODUCT INFORMATION

**Hazardous Ingredients: None**

**Does not contain any ozone depleting chemicals, VOCs or VOHAPs, HAPs or GWCs**

**A Certified Technology of the California Environmental Protection Agency (EPA) as of July 1999.**

**Verified for specific parameters on environmental safety, user safety and cleaning efficiency by the U.S.**

**EPA's Environmental Technology Verification (ETV) Program<sup>®</sup>.\***

**A Certified "Clean Air Solvent" by California's South Coast Air Quality Management District (AQMD)**

**RoHS Compliant.** All ingredients are listed on the TSCA Inventory.

Does not contain SARA Section 313 reportable compounds. SNAP Registered.

Does not contain any chemicals that require warning under California Proposition 65 or the Michigan Critical Materials Register.

## PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point:	215 F	Reactivity in Water:	None
Specific Gravity:	1.08	Melting Point:	33 F
Vapor Pressure:	< 1	pH (Concentrate):	12.4
Vapor density:	> 1 (air = 1)	pH (10% Concentration):	12.0
<b>VOC gm/l:</b>	<b>None</b>	Appearance and Odor:	Clear Purple Liquid, Mild Pleasant Odor
Solubility in Water:	Complete	HAPs	None

## FIRE & EXPLOSION DATA

**Flash Point:** **None to Boiling**

Method Used: TAG Closed Cup  
(TCC) ASTM D56

Auto-Ignition Temperature: No Data

Flammable Limits Upper: No Data

Air: Lower: No Data

Extinguisher Media: Carbon Dioxide, Chemical Foam, Water Fog

Special Fire Fighting Procedures: Do not enter confined fire space without a self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: None Known

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## HEALTH HAZARDS

**Acute:** May be irritating to skin and eyes.

**Chronic:** None expected at industrial use levels when good personal hygiene practices are followed.

**Chemical Carcinogen:** National Toxicology Program: NO

I.A.R.C. Monographs: NO

OSHA: NO

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## SIGNS & SYMPTOMS OF EXPOSURE / ROUTES OF ENTRY

**Eyes:** Can cause irritation, burning and redness.

**Skin:** Brief contact should not produce harmful effects. Prolonged contact may cause irritation or burning.

**Inhalation:** In concentrated form may cause headache and irritation of the upper respiratory tract.

**Ingestion:** Can cause nausea, vomiting and diarrhea.

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## FIRST AID PROCEDURES

**Eyes:** Wash eyes with large amounts of water for at least 15 minutes occasionally lifting upper and lower lids. Get medical attention.

**Skin:** Wash contaminated skin with soap and large amounts of water. Remove clothing and footwear and wash before reuse.

**Inhalation:** Remove to fresh air. Flush mouth and nasal passages thoroughly with water. Get medical attention. Administer oxygen if necessary.

**Ingestion:** Do not induce vomiting. Drink milk, follow with diluted vinegar. Seek medical attention.

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## SPECIAL PRECAUTIONS AND SPILL / LEAK PROCEDURES

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Wear eye protection, launder contaminated clothing before reuse. Store drums in a cool place, bung up and closed tightly.

**OTHER PRECAUTIONS:** Have eye wash station, safety shower or washing facilities available. Slippery when spilled.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Contain the spill. Absorb small spills with sand, dirt or clay. Large spills may be pumped into containers for recovery or disposal. Flush residue with plenty of water. Avoid wash water entering natural waterways or public water supplies. Neutralize with dilute acid.

**WASTE DISPOSAL METHODS:** First consult federal, state and local regulations. Contaminated absorbent may be deposited in a manner approved for this material. If diluted and neutralized, flush to treatment facility.

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## SPECIAL PROTECTION INFORMATION / CONTROL MEASURES

**Personal Protection Code "B":** Safety glasses and gloves.

**Respiratory Protection:** None normally required. Use NIOSH approved dust mask if working with mist.

**Ventilation:** Adequate.

**Protective Gloves:** Rubber or neoprene.

**Eye Protection:** Chemical splash goggles.

**Other Protective Clothing or Equipment:** Wear protective clothing to prevent skin contact. Wash hands with soap and water after handling.

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## TRANSPORTATION DATA DOMESTIC (D.O.T.)

**Proper Shipping Name:** Compound Cleaning Liquid

**UN:** None

**Hazard Class:** None

**Labels:** None

\* Information on the performance characteristics of this technology can be found at <http://www.epa.gov/etv/verifications/vcenter6-10.html> or call Smart Sonic at 1(818) 610-7900 for a copy of the ETV verification report. Use of the ETV<sup>®</sup> Name or Logo does not imply approval or certification of this product nor does it make any explicit or implied warranties or guarantees as to the product performance.

**SMT Detergent Corp. is the exclusive distributor for Smart Sonic's 440-R SMT Detergent**