### **Crown 8377 Electronic Component Cleaner - Aerosol**



# Material Safety Data Sheet

The information presented in these forms is believed to be correct and sufficient to meet the requirements of OSHA Hazard Communication standard (29 CFR 1910.1200) concerning worker's right to know.

This MSDS covers the following Aervoe aerosol product

PRODUCT NAME:



8377 Electronic Component Cleaner

#### SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: Aervoe Industries Inc.

**INFORMATION PHONE:** 775-782-0100

**DATE REVISED:** 04-22-05

ADDRESS: 1198 Mark Circle, Gardnerville, NV 89410

**EMERGENCY PHONE:** 1-800-424-9300

**REASON REVISED:** New

## SECTION II - HAZARDOUS INGREDIENTS / SARA III INFORMATION OCCUPATIONAL EXPOSURE LIMITS

HAZARDOUS COMPONENTS	WEIGHT PERCENT	OSHA PEL	ACGIH TLV	AIHA	LD50 SPECIES & ROUTE	LC50 SPECIES & ROUTE
1,2-Trans-Dichloroethylene (CAS 156-60-5) 40 - 70		200 ppm	200 ppm	N / AV	N / AV	N / AV
1,1,1,2-Tetrafluoroet (CAS 811-97-2)	hane 30 - 60	N / AV	N / AV	N / AV	N / AV	567,000 ppm / 4 hr ALC (Rat-Inha)
Isopropanol (CAS 67-63-0)	1 - 5	400 ppm	400 ppm	N / AV	4700 mg / kg (Rat-Oral)	16000 ppm / 4 hr (Rat-Inha)
Methyl Nonafluoroisobutyl Ether (CAS 163702-08-7) 1 - 5		N / AV	N / AV	750 ppm	N / AV	N / AV
Methyl Nonafluorobutyl Ether (CAS 163702-07-6) 1 - 5		N / AV	N / AV	750 ppm	N / AV	N / AV

**NOTE:** N / AP = Not Applicable N / AV = Not Available

#### SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT: N / AP SPECIFIC GRAVITY (H20=1, @ 70° F): 1.2

VAPOR DENSITY: Heavier than air SOLUBILITY IN WATER: Slight

EVAPORATION RATE: Faster than n-Butyl Acetate APPEARANCE AND ODOR: Clear & colorless liquid with slight ethereal odor

#### SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: None METHOD USED: Estimated FLAMMABLE LIMITS - LEL: N / AV UEL: N / AV

**EXTINGUISHING MEDIA:** Carbon dioxide, dry chemical, water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Water spray may be used to cool containers exposed to heat or fire to prevent pressure build up.

Self-contained breathing apparatus should be used if product is involved in fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Treat as cylinders of compressed gas. Closed containers may rupture due to pressure

build up from extreme heat or fire.

FLAMMABILITY: This product when tested according to 16 CFR 1500.45 (Aerosol Flame Propagation Test) is not classified as extremely flammable or flammable.

SENSITIVITY TO IMPACT: Aerosol cans are under pressure. Product will be expelled rapidly if container is punctured.

SENSITIVITY TO STATIC DISCHARGE: Very slight under normal use

#### **SECTION V - REACTIVITY DATA**

STABILITY: Stable CONDITIONS TO AVOID: Open flames, sparks, electrical arcs.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong bases & oxidizing agents. Alkali or alkaline earth metals - powdered Al, Zn, Be, etc. HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Hydrochloric and hydrofluoric acids, possibly carbonyl halides & fluorides during combustion.

HAZARDOUS POLYMERIZATION: Will not occur

#### SECTION VI - HEALTH HAZARD DATA

INHALATION: Respiratory tract irritant. May cause dizziness, light-headedness, nausea and / or headaches.

SKIN CONTACT: Prolonged or repeated contact may cause irritation and dermatitis.

**EYE CONTACT:** Painful with slight to moderate irritation.

SKIN ABSORPTION: Not likely to be absorbed in toxic amounts under normal use.

INGESTION: Not likely to be harmful in small amounts but swallowing large amounts may be harmful.

CARCINOGENICITY: The ingredients are not listed as a human carcinogen by IARC, ACGIH, NTP, or OSHA.

TERATOGENICITY: Not established MUTAGENICITY: Not established
MEDICAL CONDITION GENERALLY AGGRAVATED BY EXPOSURE: Not established

EMERGENCY AND FIRST AID PROCEDURES: INHALATION - Remove from exposure, seek medical attention if signs/symptoms persist.

SKIN - Wash affected area with soap and water, remove contaminated clothing, seek medical attention if irritation persists.

EYES - Flush immediately with water for 15 minutes, seek medical attention if irritation persists.

INGESTION - Do NOT induce vomiting, drink plenty of water, seek medical attention.

#### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all sources of ignition. Ventilate area. Prevent from entering a watercourse. Use an inert absorbent material and non-sparking type tools.

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state and federal regulations. Do not incinerate closed containers.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Do not store above 120° F (49° C). Do not store or use near heat, sparks or flame.

OTHER PRECAUTIONS: Do not smoke while using this product.

#### **SECTION VIII - CONTROL MEASURES**

**RESPIRATORY PROTECTION:** In areas with poor ventilation, use a NIOSH approved Organic Vapor Cartridge Respirator.

For concentrations above the TLV (as defined in Section II), use a positive air supplied respirator.

VENTILATION: General ventilation to maintain exposure limits below TLV's as defined in Section II.

**PROTECTIVE GLOVES:** Chemical resistant gloves such as Neoprene or Nitrile rubber.

**EYE PROTECTION:** Safety glasses or goggles.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Not established.

WORK / HYGIENIC PRACTICES: Avoid prolonged or repeated contact. Do not breathe vapors. Wash contaminated clothing prior to reuse.

#### SECTION IX - DISCLAIMER

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE BUT IS NOT WARRANTED TO BE SO. NOTHING CONTAINED HEREIN CONSTITUTES A SPECIFICATION NOR IS IT INTENDED TO WARRANT SUITABILITY FOR THE INTENDED USE.

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<sup>\*\*\*</sup>No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present.\*\*\*