MATERIAL SAFETY DATA SHEET

Cortec, Spray Technologies Division 1300 South River Street Spooner, WI 54801

PHONE: 715-635-8711 TOLL FREE 1-800-826-6791 FAX: 715-635-2200

EMERGENCY PHONE NO.: (FOR SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT): 1-800-535-5053

* * * * * * * * CONTACT CLEANER 11101, 11103, 11106 * * * *

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: Contact Cleaner (aerosol)

PRODUCT DESCRIPTION: Fast acting, non-flammable cleaner quickly removes soils, oxides and other contaminants from metal-to-metal contacts. May be used on energized equipment; non-corrosive, safe for sensitive metals.

RESTRICTIONS: Commercial / industrial use only

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT NAME(S)	CAS#	OCCUPATIONAL EXPOSURE LIMITS	
		TLV OR PEL	ORAL LD-50
1,1-Dichloro-1- fluoroethane	1717-00-6	500 ppm (See below*)	> 5 gm/kg (rat)
Carbon Dioxide	124-38-9	5000 ppm	N.E.

*500 ppm / 8 hr. shift Workplace Environmental Exposure Level (WEEL) is established by the American Industrial Hygiene Association.

Carcinogenic: **OSHA** = no **NTP** = no **IARC** = no

SECTION III - PHYSICAL DATA

APPEARANCE: Clear, colorless liquid

ODOR: Faint ethereal odor

BOILING POINT: 89.6 degrees F. (32 degrees C.)

VAPOR DENSITY (Air = 1): 4.0 VAPOR PRESSURE: 3345 mmHg

SOLUBILITY IN WATER: Slight (0.021% by weight)

SPECIFIC GRAVITY: 1.24

EVAPORATION RATE (Ether = 1): >1

SECTION IV - FIRE AND EXPLOSION DATA

HMIS RATING: Health - 1, Fire - 0, Reactivity - 1

FLASH POINT: Non-flammable; however, flash may result if concentration of material falls within the flammable range listed immediately following.

FLAMMABLE LIMITS: LEL: 7.6 UEL:

17.7

EXTINGUISHING MEDIA: Dry chemical, CO2 or water spray. UNUSUAL FIRE AND EXPLOSION HAZARDS: Decomposition may occur with high temperatures or open flame. Containers exposed to heat may over-pressurize and fail explosively.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus, proper skin and eye protection. Cool fire-exposed containers with water fog.

SECTION V - HEALTH HAZARD DATA

EMERGENCY AND FIRST AID PROCEDURES:

Eye Contact: Flush eyes with water for at least 15 minutes. Consult a physician. Skin Contact: Wash affected area with soap and water. If irritation develops or persists, consult a physician. Inhalation: Remove victim to fresh air, administer oxygen if necessary. If victim has stopped breathing begin CPR, get immediate medical attention.

<u>Ingestion:</u> If liquid is swallowed, call a physician immediately. DO NOT induce vomiting unless directed by physician. If involuntary vomiting occurs, keep victim's head below hips to prevent aspiration of vomitus into lungs.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY

EXPOSURE: Pre-existing skin conditions, cardiovascular disease.

PRIMARY ROUTES OF ENTRY: Inhalation, skin and eye contact.

HEALTH HAZARDS (acute and chronic) / EFFECTS OF OVEREXPOSURE: Excessive inhalation of high vapor concentrations may cause dizziness, weakness, fatigue, nausea, headache, CNS depression, cardiac arrhythmia, unconsciousness, or in extreme overexposure, possible asphyxiation.

SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal use and storage conditions. HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS (under fire conditions): Thermal decomposition may produce hydrochloric acid, hydrofluoric acid, carbonyl halides such as phosgene.

INCOMPATIBILITY: Avoid contact with strong acids, alkalies, strong oxidizing agents, finely divided reactive metals such as Al, Mg, Zn, Be, Li, etc.

CONDITIONS TO AVOID: Avoid sources of ignition including sparks, flames, cigarettes and other high-intensity energy sources.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Extinguish potential ignition sources, ventilate area. Remove or take up spilled material on an inert absorbant and place into a closed-top DOT approved container for disposal. Prevent liquid from entering sewers or water.

WASTE DISPOSAL: Comply with all existing Federal, State and Local environmental regulations. Waste or unwanted material may be reclaimed or incinerated by permitted facilities.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: Not normally required; mechanical (general) ventilation is generally adequate. . Wear a NIOSH approved organic vapor respirator in nuisance level vapor concentrations, a positive pressure, air-supplied respirator in high vapor concentrations or oxygen-deficient atmospheres.

PROTECTIVE GLOVES: PVA or neoprene gloves.

EYE PROTECTION: Safety glasses, splash goggles, face shield

OTHER PROTECTIVE EQUIPMENT: Eye wash station.

SECTION IX - SPECIAL PRECAUTIONS AND STORAGE DATA

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid eye and skin contact with liquid. Avoid excessive inhalation of vapors. Use in a well-ventilated environment. Intentional inhalation of contents is harmful and may be fatal.

PRECAUTIONS TO BE TAKEN IN STORING: Store containers below 120° F. (48° C.), away from heat or ignition sources, open flame, out of direct sunlight.

SECTION X - SHIPPING DATA

DOT SHIPPING NAME: Aerosols, non-flammable, (each not exceeding 1L capacity)

U.N./N.A NUMBER: UN1950 DOT HAZARD CLASS: 2.2

DOT REQUIRED LABEL: 2, (air shipment only)

(continued on page 2) Page 2 Contact Cleaner 11101, 11103, 11106

DOT EXCEPTION: See Code 49 section 172.101, column (8A). Section 173.306(h) permits "limited quantity" materials (inner packagings which do not exceed 1L capacity / 61 cubic inches and for which internal pressures do not exceed 180 psig at 130 degrees F.) meeting section 171.8 definition of "consumer commodity" to be renamed "Consumer commodity", reclassed as ORM-D when shipped via ground mode, domestically.

FREIGHT CLASS: NMFC 48580

LTL: 55 TL: 35

MW:36

T.S.C.A. STATUS: Components listed

PREPARED BY: Roger Hanson

DATE PREPARED: 01-26-00 SUPERSEDES: 01-13-

00

DISCLAIMER: This information is furnished without warranty, expressed, or implied, except that it is accurate to the best knowledge of Cortec, Spray Technologies Division. The data on this sheet relates only to the specific material designated herein. Cortec, Spray Technologies Division assumes no legal responsibility for use or reliance upon this data.

N.E. = NOT ESTABLISHED N.A. = NOT APPLICABLE