

MATERIAL SAFETY DATA SHEET

SECTION 1 : PRODUCT IDENTIFICATION AND USES

Product name	CONTACT CLEANER (CH900)
Chemical Family	Alcohol/aliphatic hydrocarbon blend.
Chemical Formula	Chemical mixture
Supplier	DEK Canada Inc. 1928, St-Regis Blvd Dorval, Quebec H9P 1H6 Tel : 514-685-5800
Material Uses	High performance contact and electronic parts cleaner.

SECTION 2 : HAZARDOUS INGREDIENTS

Name	# Cas	% en poids	LC50/LD50
Ethanol	64-17-5	30-60	(LD50) mg/kg: Acute: 7060 (Rat.). (LD50) mg/kg: Acute: 20000 (Rabbit). Acute: 8000 (Rat.) (4 hour (s)).
Isopropyl alcohol	67-63-0	30-60	(LD50) mg/kg: Acute: 3600 (Mouse). 5045 (Rat). (LC50) ppm : Acute: 22600 (Rat) 4 hour(s).
N-hexane	110-54-3	1-5	(LD50) mg/kg: Acute: 32400 (Rat).
Carbon dioxide	124-38-9	1-5	Not available.

SECTION 3 : PHYSICAL DATA

Physical State and appearance	Liquid (Aerosol Concentrate)	Odor	Mild.
pH (1% soln/water)	Not available.	Taste	Not available.
Odor Threshold	50 ppm based on data for: Isopropyl Alcohol. Weighted average: 40 ppm		
Volatility	Not available.		
Evaporation Rate	Not available		
Melting Point	Not available		
Boiling Point	The lowest known value 149°F (N-hexane)		
Density	0.6952 – 0.7052 (Water = 1)		
Vapor Density	Greater than 1 (Air = 1)		
Vapor Pressure	Not available.		
Log Kow	Not available.		
Ionicity (Surface Active Agent)	Not available.		
Critical Temperature	Not available.		
Instability Temperature	Not available.		
Conditions of Instability	Not available.		
Dispersion Properties	See solubility in water.		
Solubility	Miscible in water.		

Continued on Next Page

SECTION 4 : FIRE AND EXPLOSION DATA

The product is:	Extremely Flammable Aerosol
Auto-ignition temperature	The lowest known value 433.4 °F (N-hexane)
Products of Combustion	These products are carbon oxides (CO, CO2) and other irritating gases.
Flash Points	The lowest known value CLOSED UP: -16.6 °F (Tagliabue) (N-hexane).
Flammable Limits	LOWER: 0.6% UPPER: 19%
Extinguishing Media	SMALL FIRE: Use DRY chemicals, CO2 or foam. LARGE FIRE: Use foam or water fog. Cool containing vessels with water spray in order to prevent pressure build-up, auto-ignition or explosion. Avoid spreading burning liquid with water used to cool containers. Self-contained respiratory protection should be provided for firefighters.
Flammability	The flammability of an aerosol by WHMIS definition is determined by its flame-extension or its flashback. The flame-extension of this product is greater than 45cm. Canadian NFC, Level 3 3 Aerosol. Do not use in the presence of open flame or spark. Do not place in hot water or near radiators, stoves or other sources of heat.
Risks of Explosion	Risks of explosion of the product in presence of mechanical impact: DO NOT subject aerosol cans to impact. Risks of explosion of the product in presence of static discharge: Vapours of this product may form a flammable/explosive mixture with air in enclosed areas when vapours present are between the lower (0.6%) and a upper (19%) flammable limits and come into contact with open flames, sparks or static discharge. DO NOT expose aerosol containers to open flames, heat or ignition sources. Container may explode if heated.

SECTION 5 : REACTIVITY

Stability	The product is stable.
Hazardous Decomposition Products	These products are carbon oxides (CO, CO2) and other irritating gases.
Degradability	Not available.
Products of Degradation	Not available.
Corrosivity	Not considered to be corrosive for metals and glass according to our database.
Reactivity	Avoid contact with strong oxidizing agents, strong acids and strong alkalies.
InstabilityTemperature	Not available.
Conditions of Instability	No additional remark.

SECTION 6 : TOXICOLOGICAL PROPERTIES

Routes of Entry	Ingestion. Inhalation. Skin contact. Eye contact.
TLV	Ethanol TWA: 1000 (ppm) from ACGIH
	IsopropylAlcohol TWA: 400 CEIL: 500(ppm) TWA: 980 CEIL: 1225 (mg/m ³)
	Normal Hexane TWA: 50 CEIL: 125 (ppm) TWA: 360 CEIL: 450 (mg/ m ³)
	Carbon Dioxide TWA: 5000 (ppm) Consult local authorities for acceptable exposure limits.

Continued on Next Page

CONTACT CLEANER (CH900)

Toxicity to Animals	ATTENTION: THE VALUE OF CL50 BELOW ARE FOR A PERIOD OF 4 HOURS EXPOSURE. Acute oral toxicity (DL50):>5000 mg/kg (Rat) (Ethanol). Acute oral toxicity (DL50: 3600 mg/kg (Mouse) (Isopropyl Alcohol). Acute oral toxicity (DL50):>5000 mg/kg (Rat) (N-hexane). Acute toxicity of the vapor (CL50):>5000 ppm (Rat) (Ethanol). Acute toxicity of the vapor (CL50):>5000 ppm (Rat) (Isopropyl Alcohol).
Chronic Effects on Humans	Prolonged or repeated skin contact may lead to dermatitis.
Acute Effects on humans	EYE CONTACT: May cause severe irritation, redness, tearing and blurred vision. SKIN CONTACT: May cause irritation, defatting, drying and cracking of skin. INHALATION: Vapours may be irritating to nose, throat and respiratory tract. Excessive inhalation of vapours may cause Central Nervous System effects including dizziness, weakness, fatigue, nausea, headache and possible unconsciousness. INGESTION: May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which can be fatal. Can be fatal if inhaled or ingested. This product may irritate eyes and skin upon contact.
Synergetic Products (Toxicologically)	Not available.
Irritation/Corrosivity	Not available.
Sensitization	Not available.
Carcinogenic Effects	Not available.
Toxic Effects on Reproduction	Not available.
Teratogenic Effects	Not available.
Mutagenic Effects	Not available.

SECTION 7 : PREVENTIVE MEASURES

Small Spill and Leak	Ventilate area and eliminate all sources of ignition. Keep away from heat. Soak up with an absorbent material. It is recommended that chemical resistant gloves and safety glasses be worn to clean up spills.
Personal Protective Equipment	It is recommended to wear safety glasses and chemical resistant gloves.
Large Spill and Leak	Not applicable for aerosol containers.
Protective Clothing	Not applicable for aerosol containers.
Engineering Controls	Use under well-ventilated conditions.
Precautions	Contents under pressure. Container may explode if heated. Direct inhalation of spray may be harmful. Keep out of reach of children.
Storage	Store in a cool, dry place. Do not place in hot water or near radiators, stoves or other sources of heat. Do not puncture or incinerate container or store at temperatures over 50°C or in direct sunlight.
Handling	Do not use in the presence of open flame, sparks or ignition sources. Keep away from heat. Avoid breathing vapours or spray mists. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water.
Waste Disposal	Recycle to process, if possible. Consult your local or regional authorities. Do not dispose in sewers. When container is empty, press button to release all pressure, then dispose of in garbage can.
Special Shipping Information	None.

Continued on Next Page

CONTACT CLEANER (CH900)

SECTION 8 : FIRST AID

Eye contact	Flush eyes with plenty of water for 15 minutes, lifting upper and lower lids, occasionally. Contact physician.
Skin Contact	Wash thoroughly with soap and water. If irritation occurs or persists, contact physician. Remove contaminated clothing and wash before reuse.
Hazardous Skin Contact	No additional information.
Slight inhalation	Remove affected person to fresh air. If breathing is difficult, administer oxygen. If breathing stops give artificial respiration. Contact medical center or physician immediately.
Hazardous Inhalation	No additional information.
Slight ingestion	If swallowed, call physician or poison control center immediately. Do not induce vomiting. Aspiration of material into lungs due to vomiting may cause chemical pneumonitis which can be fatal.
Hazardous Ingestion	No additional information.

SECTION 9 : MSDS PREPARATION

References	Not available.
No additional remark.	
Validated by DEK Canada February 13, 2009	
EMERGENCY PHONE: Contact Local Authorities or Poison Control Centre	

CLASSIFICATION

TDG Road / Rail	CONSUMER COMMODITY.
WHMIS	WHMIS CLASS A: Compressed gas.
	WHMIS CLASS B-5: Flammable aerosol.
	WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).

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