MATERIAL SAFETY DATA SHEET

(Prepared According to 29 CFR 1910.1200 & WHMIS) 4 = Extreme

A = Safety Glasses F = C + Dust Mask $\mathbf{B} = \mathbf{A} + \text{Gloves}$ G = B + Respirator 3 = HighC = B + Apron $\mathbf{H} = \mathbf{F} + \mathbf{Goggles}$ 2 = Moderate **D** = **C** + Face Shield I = B + Respirator 1 = Slight E = B + Dust Mask X = Ask Supervisor 0 = Insignificant **IDENTIFICATION SYSTEM** Health.... 3 Flammability.... 0 Physical Hazard.... 0

LABEL: Corrosive

Protection.... C

HMIS HAZARDOUS MATERIALS

SECTION I - PRODUCT IDENTIFICATION

Product Code: 241F Supersedes date: January 24, 2012 Section(s) changed: I Effective date: January 15, 2013

PRODUCT NAME: ARJO DISINFECTANT CLEANSER IV GENERIC NAME: Disinfectant

DISTRIBUTORS NAME: ArjoHuntleigh Canada Inc. INFORMATION PHONE NUMBER: 800-665-4831

CHEMICAL FAMILY: Disinfectant/Cleaner FORMULA: Proprietary Mixture

DISTRIBUTORS ADDRESS: Suite 300 90 Matheson Boulevard West

Mississauga, Ontario L5R 3R3

EMERGENCY PHONE NUMBER IN THE EVENT OF CHEMICAL EMERGENCIES INVOLVING A SPILL, LEAK, FIRE OR ACCIDENT: Chemtrec 800-424-9300 PROPER SHIPPING DESCRIPTION:

> 1 Gal: UN1903, Disinfectants, liquid, corrosive, n.o.s. (Contains quaternary ammonium compounds), 8, III

≤ 1 Gal: Consumer Commodity, ORM-D DIN [Drug Identification Number]: 02241540

LABEL: ORM-D WHMIS CLASSIFICATION: Not applicable -- classified as a drug

CHEMICAL COMPONENTS: Water, n-Alkyl (C14, 50%; C12, 40%; C16, 10%) Dimethyl Benzyl Ammonium Chloride, Octyl decyl dimethyl ammonium chloride, Dioctyl dimethyl ammonium chloride, Didecyl dimethyl ammonium chloride, Tetrasodium Ethylenediaminetetraacetate, Sodium Metasilicate,

Nonylphenoxypolyethoxyethanol.

SECTION II -HAZARDOUS INGREDIENTS					
CHEMICAL NAME	CAS No.	Wt%	OSHA PEL	ACGIH TLV	OTHER
Octyl decyl dimethyl ammonium chloride	32426-11-2	3.26	NE	NE	
Dioctyl dimethyl ammonium chloride	5538-94-3	1.63	NE	NE	
Didecyl dimethyl ammonium chloride	68424-95-3	1.63	NE	NE	
n-Alkyl (C ₁₄ , 50%; C ₁₂ , 40%; C ₁₆ , 10%)-					
- Dimethyl benzyl ammonium chloride	68424-85-1	4.34	NE	NE	
Tetrasodium Ethylenediaminetetraacetate	64-02-8	<10	NE	NE	
Nonylphenoxypolyethoxyethanol	9016-45-9	< 5	NE	NE	
Ethanol	64-17-5	< 5	1000ppm	1000ppm	

The information & recommendations set forth herein are presented in good faith & believed to be current & reliable. The manufacturer makes no representation as to the completeness or accuracy thereof & supplies information upon the condition that the persons receiving same will make their own determination as to its suitability for their purpose prior to use. In no event will the manufacturer be responsible for any damage of any nature whatsoever resulting from the use of or reliance upon this information. No representation or warranty, either expressed or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which it refers.

SECTION III - PHYSICAL/CHEMICAL DATA

Vapor Pressure (mm Hg): NE Physical State: Liquid Boiling Point: ~100°C (212°F) Vapor Density (Air=1): NE Freezing Point: ~0°C (32°F) Evaporation Rate: NE Specific Gravity: 1.012 pH Concentrate: 12-13 Coefficient of Water/ pH Use Dilution: 10-11 Oil Distributions: NA %Volatile by volume: 81%

Solubility in Water: Complete Odour and Appearance: Clear, Yellow Liquid Lemon Fragrance

SECTION IV - FIRE & EXPLOSION HAZARD DATA FLAMMABILITY: No Data FLASH POINT (Method Used): Not Known LIMITS: LEL:NA

UEL:NA AUTOIGNITION TEMPERATURE: Not self-igniting TDG FLAMMABILITY CLASS: NA

MEANS OF EXTINCTION: Water spray or fog, foam, dry chemical, carbon dioxide, alcohol foam, if product is involved.

SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH/MSHA approved self-contained breathing apparatus and protective clothing.

UNUSUAL FIRE & EXPLOSION HAZARD: Use water spray to cool adjacent fire exposed containers. Product will not burn but may splatter if temperature exceeds boiling point. HAZARDOUS COMBUSTION PRODUCTS:Carbon Dioxide, Carbon Monoxide; Nitrous Oxides.

RATE OF BURNING: Unknown

SENSITIVITY TO STATIC DISCHARGE: None

OSHA REGULATED? NO

SECTION V - REACTIVITY DATA

Odour Threshold: NA

Chemical Stability: Stable. Hazardous Polymerization: Will not occur.

Incompatibility (Materials to Avoid): Strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may produce toxic fumes of organic chlorides, amines, hydrogen chloride, ammonia, and oxides of carbon and nitrogen.

SECTION VI - STORAGE & HANDLING INFORMATION

KEEP OUT OF REACH OF CHILDREN. CAUTION.

Store upright in original closed container.

SECTION VII - TOXICOLOGICAL PROPERTIES OF PRODUCT

Carcinogenicity: NE NTP? NF ROUTES OF ENTRY: Skin Contact, Eye contact, Chronic Inhalation, Ingestion

EFFECTS OF ACUTE EXPOSURE: Ingestion: May cause marked local irritation of the gastrointestinal tract accompanied by nausea and vomiting. Signs of

systemic effects may occur; including restlessness, apprehension, weakness, shortness of breath, cyanosis, convulsions and coma. Death occurs as a result of paralysis of the respiratory muscles. Eyes: Eye contact causes painful damage and corneal irritation. Skin: Contact can cause redness, burns, pain and blistering. Inhalation [of mist]: Can cause nose, throat and respiratory tract irritation, coughing and headache.

EFFECTS OF CHRONIC EXPOSURE: Based upon the information available for similar products, it is anticipated that this material will be corrosive to the skin and eyes upon direct or prolonged contact. Solvent vapours or mists of product can produce irritation of mucous membranes. Ingestion can produce immediate burning pain in the mouth, throat and abdomen. Severe internal damage can occur if ingested and may be fatal. Exposure to ethyl alcohol concentrations over 1,000 ppm cause headaches, irritation of the eyes, nose and throat, and if long continued, drowsiness and lassitude, a loss of appetite and inability to concentrate.

IRRITANCÝ OF PRODUCT:

EXPOSURE LIMITS OF PRODUCT: NA

LD₅₀=Oral (rat): 1.65 g/kg. Dermal (rabbit): 1.87 g/kg SENSITIZATION TO PRODUCT: In rare instances

IARC Monographs? NE

CARCINOGENICITY, REPRODUCTIVE EFFECTS, TERATOGENICITY, MUTAGENICITY: NA

SECTION VIII - PREVENTATIVE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: See below for specific preventative measures

GLOVES: Protective gloves for handling concentrate optional but recommended for diluted product.

RESPIRATORY: Proper ventilation must be provided in accordance with good ventilation practices in processes where TLV may be exceeded, or mists and/or vapours may be generated. Aerosols generated in cleaning and disinfection may because irritation to the eyes, nose, throat and respiratory system. Some individuals may be more susceptible to respiratory irritation and those individuals should wear appropriate respiratory protection during cleaning and disinfection to prevent inhalation of possible airborne disinfectant aerosol particles.

CLOTHING: As required by employer code.

FOOTWEAR: None Required

ENGINEERING CONTROLS: General ventilation normally adequate

EYE: Chemical splash goggles, face shield for handling concentrate, optional but recommended for diluted product

SECTION VIII - PREVENTATIVE MEASURES (CONT'D.)

LEAK AND SPILL PROCEDURE: Danger! Floors may become slippery. Contain spill and throw in trash or approved landfill site. Do not reuse empty containers. If accidentally spilled on floor, wipe up immediately as staining may occur.

WASTE DISPOSAL: Neutralize carefully with soda, ash or limestone. Dispose of in accordance with applicable federal, state and local regulations.

HANDLING PROCEDURES & EQUIPMENT: See above.

STORAGE REQUIREMENTS: Store at ambient temperature. Do not store on side to avoid impacting and creasing of walls. Keep out of reach of children SPECIAL SHIPPING INFORMATION: Keep separate from alkalis.

SECTION IX - FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES:

EYES: Flush with flowing water for 15 minutes & see physician.

INGESTION: In case of accidental ingestion and the victim is conscious, give 2 to 3 glasses of mild soap solution or egg whites beaten in water. Do not induce vomiting. Avoid alcohol. CALL A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY. **Note to physician**: This product may cause mucosal damage and systemic effects on accidental ingestion. Gastric lavage with mild soap solution under medical supervision may be helpful if done early -- within about 15 to 30 minutes after ingestion. Maintain clear airway and administer oxygen with artificial respiration if necessary. Measures against circulatory shock may be necessary. If convulsions occur, they may be controlled by the cautious intravenous injection of a short acting barbiturate drug.

NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

SKIN: Immediately flush with water. Call a physician if irritation develops. Completely decontaminate clothing, shoes and leather goods before reuse or discard. INHALATION: Move victim to fresh air. If symptoms persists, call a physician.

SECTION X - PREPARATION INFORMATION

PREPARED BY: C.Thorn

E,H,and S Administrator 314-771-6600

NE - Not Established NA - Not Applicable GT - Greater Than

Manufactured by: Intercon Chemical Company 1100 Central Industrial Drive, St. Louis, MO 63110