Material Safety Data Sheet

Date: 3-29-10

Section 1 – Product & Company Identification

Product Name: Sub Zero Freezer Cleaner - RTU Product ID Number: 134 Product Use: Equipment Cleaner in freezing environments EPA Reg. Number: N/A Manufacturer: Arrow Chemical Products, Inc. 2067 Ste. Anne Detroit, MI 48216 Telephone 313-237-0277 Numbers: 24 hr. Emergency Assistance: Infotrac 1-800-535-5053

Section 2 – Composition/Information on Ingredients

INGREDIENT	CAS #	% by Weight	Exposure Limits	LC ₅₀ /LD ₅₀
Dipropylene Glycol	25265-71-8	30% - 40%	Not Established	
Isopropyl Alcohol	67-63-0	0% - 10%	PEL/T.L.V.: 400 ppm	
Potassium Hydroxide	1310-58-3	0% -10%	PEL/T.L.V. 2mg/m ³	

Section 3 – Hazards Identification

Emergency Overview:

Potential Health Effects:

Acute: Harmful if swallowed. May cause severe eye and skin irritation. Inhalation may cause irritation to the mucous membranes, nose, throat, and lungs. Chronic: None known.

Carcinogenic Effects: Not classified or listed by IARC, NTP, OSHA, EU and ACGIH.

Section 4 – First Aid Measures

Eyes: Immediately flush with plenty of water for several minutes. Get medical attention. Skin/Clothing: Remove contaminated clothing. Wash skin with soap and water. If irritation persists or if contact has been prolonged, seek medical attention. Inhalation: Move person to fresh air. If irritation occurs, call a physician. Ingestion: Get immediate medical attention. Note to Physician:

Section 5 – Fire Fighting Measures

Hazardous Combustion Products: Burning can produce the following combustion products: Carbon Monoxide and/or Carbon Dioxide.

Extinguishing Media: Water

Fire Fighting Equipment & Instructions: Use self-contained breathing apparatus and protective clothing. Use water spray to cool fire exposed containers and structures. Use water spray to disperse vapors, re-ignition is possible.

Remarks on Explosion Hazard: Drums heated by a fire may explode.

Section 6 – Accidental Release Measures

Spill and Leak Procedures

Small Spills: Flush with large amounts of water.

Large Spills: Extinguish and do not turn on any ignition source until the area is determined to be free from fire or explosion hazard. Personal Protection for Large Spills: Rubber gloves or other impervious gloves. Use self-contained breathing apparatus in high vapor concentration. OSHA approved safety goggles with side shields.

Section 7 – Handling & Storage

Handling Procedures: Precautions for Safe handling and use – WARNING! Flammable. Use with adequate ventilation. Wash thoroughly after handling. Avoid contact with eyes. Keep container closed when not in use.

Storage Procedures: KEEP OUT OF REACH OF CHILDREN. Keep away from heat, sparks, and flames. For industrial and institutional use only. Incompatibility: Materials to avoid: None known.

Section 8 – Exposure Controls/Personal Protection

Engineering Controls: Good general ventilation should be sufficient for most conditions.

Personal Protective Equipment:

Eyes/Face: OSHA approved safety goggles with side shields. Eye bath.

Skin: Rubber gloves or other impervious gloves. Safety shower.

Respiratory: Room ventilation is expected to be satisfactory where this product is used. Local ventilation is needed at points where vapors can be expected to escape to the workplace air.

The following ingredients have established exposure guidelines:

INGREDIENT:	EXPOSURE GUIDELINE	GUIDELINE VALUE			
Isopropyl Alcohol	T.L.V.	400 ppm			
Potassium Hydroxide	T.L.V.	2 mg/m^3			
All TWAs are for an 8-hour period and all STELs are for 15 minutes unless specifically noted as being for another time period.					

Section 9 – Physical & Chemical Properties

Flash Point: >200° F Specific Gravity: 1.003 Boiling Point: No Data Melting/Freezing Point: N/A VOC Content: N/A Evaporation Rate (Water = 1): >1 pH: 12.0 – 13.0 Solubility: Complete



Flammable Limits: Not Determined Explosion Hazards: Drums heated by a fire may explode. Appearance and Odor: Clear Liquid, Alcohol Odor

Section 10: Stability & Reactivity

Chemical Stability: Stable Incompatibilities: Strong oxidizing agents. Halogens. Strong inorganic acids, aldehydes, halogen compounds. Hazardous Decomposition: Burning can produce the following combustion products: Carbon Monoxide and/or Carbon Dioxide

Section 11 – Toxicological Information

Routes of Entry: Eyes, skin, ingestion, inhalation Carcinogenicity: No Carcinogenicity data available for this product. Toxicity to Animals: No data Acute Oral LD50: Acute Dermal LD50: Acute Effects on Humans: Harmful if swallowed. Chronic Effects: May cause severe eye and skin irritation. Inhalation may cause irritation to the mucous membranes, nose, throat, and lungs. Special Remarks on Toxicity: CHEMICAL INGREDIENTS LISTED AS POTENTIAL OR KNOWN CARCINOGENS INGREDIENT: OSHA NTP IARC No ingredients listed in this section.

Section 12 – Ecological Information

Ecotoxicity: No data Environmental Fate: No data

Section 13 – Disposal Considerations

Disposal Instructions: Incinerate in a furnace where permitted under federal, state and local environmental control regulations.

Section 14 – Transportation Information

DOT Hazard Class: DOT Proper Shipping Name: TDG Classification: Not controlled under TDG (Canada).

Section 15 – Regulatory Information

TSCA Status

All ingredients are listed on the TSCA Chemical Inventory. DSL/NDSL: All components listed unless noted elsewhere on this MSDS. CERCLA/SARA SARA Title III, Sections 311/312 – This act requires reporting under the Community Right-to-Know provisions due to the inclusion of the following components of this material in one or more of the five hazard categories listed in the 40 CFR 370: Classification of this product: SARA Title 313 – This act requires submission of annual reports of releases of the following components of this material if the threshold reporting quantities, as listed in 40 CFR 372, are met or exceeded:

CHEMICAL NAME	CAS NO.	MAXIMUM CONCENTRATION	COMMENT
Isopropyl Alcohol	67-63-0		
Potassium Hydroxide	1310-58-3		

Reportable Quantities/Threshold Planning Quantities: CERCLA requires notification of the National Response Center (Telephone 1-800-424-8802) in the event of a release of quantities of the following hazardous materials contained in this product, if the release is equal to or greater than the Reportable Quantities (RQs). SARA 302/304 requires emergency planning, including agency notification, for possible release of the following components of this material, based upon the Threshold Planning Quantities (TPQs) and/or release of Reportable Quantities.

REPORTABLE QUANTITY (RQ) THRESHOLD PLANNING QUANTITY (TPQ)

Isopropyl Alcohol Potassium Hydroxide 1,000 Lbs. State & Provincial Right to Know & Selected Regulatory Lists The following ingredients appear on various state right to know lists and/or California's Proposition 65 List CHEMICAL NAME STATE LIST Isopropyl Alcohol (67-63-0) CT, IL, RI, PA, FL, MN, MA, NJ, CA, TN

WHMIS Classification: Not controlled under WHMIS (Canada).

Section 16 – Other Information

Hazard Ratings Hazard Rating Scale:

CHEMICAL NAME

Hazard Rating Scale:

4 = Extreme

3 = High

2 = Moderate

1 =Slight

0 = Insignificant

HEALTH	2
FLAMMABILITY	2
REACTIVITY	0

Information Contact: Arrow Chemical Products, Inc., 2067 Ste. Anne, Detroit, MI 48216

The seller makes no warranty expressed or implied concerning the accuracy of any results to be obtained from the use of any information and no warranty expressed or implied concerning the use of the products. The buyer assumes all risks of the use and/or handling.

