	MATERIAL SAFETY DATA SHEET Merlin™ One-Step Prep Applicator
---	---	---

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Merlin™ One-Step Prep Applicator
Use/Size Skin prep antiseptic
Product Numbers 605039 and 605030
Manufacturer/Supplier The Kendall Company
Address 15 Hampshire Street
Mansfield, MA 02048
Phone Number (508) 261-8000 (Monday - Friday 8:00 am to 5:00 pm)
Chemtrec Number (800) 424-9300
Revision Date:
MSDS Date: October 12, 2006

This MSDS has been compiled in accordance with - EC Directive 91/155/EEC - OSHA's Hazcom Standard (29 CFR 1910.1200)

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Component Name	CAS#/Codes	Concentration	R Phrases	Classification
Isopropyl alcohol	67-63-0 200-746-9	>60%	R11, R36, R67	F, Xi
Iodine	7553-56-2 231-442-4	<1.0%	R20/21, R50	Xn, N
Water	7732-18-5	<40 %	None	None

3. HAZARD IDENTIFICATION

Routes of Entry

- Absorption - Eye contact - Inhalation - Skin contact

Carcinogenic Status

Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs

- Central Nervous System - Skin - Eye - Liver - Respiratory System

Health Effects - Eyes

Liquid, mist or vapor will cause conjunctival irritation and possibly corneal damage. Do not contact with mucous membrane.

Health Effects - Skin

Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis. Liquid may be absorbed through the skin but not in toxicologically significant amounts, unless the area of contact is large and exposure prolonged. Do not contact with mucous membrane.

Health Effects - Ingestion



Not a likely route of entry during normal conditions of use. If liquid contents are swallowed, the following effects may occur: - Irritation of mouth, throat and digestive tract

A large dose may have the following effects:

- dizziness - drowsiness - headache - mental confusion - nerve damage leading to numbness and muscle weakness - fall of blood pressure - liver damage - lung damage

Health Effects - Inhalation

Exposure to excessive amounts of vapor may cause headache, drowsiness, dizziness and effects similar to ingestion.

		MATERIAL SAFETY DATA SHEET Merlin™ One-Step Prep Applicator
---	---	--

3. HAZARD IDENTIFICATION

EU Main Hazards Highly flammable. Irritating to eyes. Vapors may cause drowsiness and dizziness

4. FIRST AID MEASURES

Eyes:
 Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin
 Obtain medical attention if soreness or redness persists.

Ingestion
 Have victim drink 1-3 glasses of water to dilute stomach contents. Induce vomiting if directed to do so by medical personnel. Obtain medical attention immediately.

Inhalation
 Remove from exposure. If there is difficulty in breathing, give oxygen. Obtain medical attention immediately.

Advice to Physicians
 Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media
 Use foam, dry chemical or carbon dioxide. Be aware of the possibility of re-ignition. Keep containers and surroundings cool with water spray.

Unusual Fire and Explosion Hazards
 Vapors can travel a considerable distance to a source of ignition and flashback. Flashback can occur if air temperature exceeds flash point. Be aware of possibility of re-ignition.



Protective Equipment for Fire-Fighting
 Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal. Eliminate all sources of ignition.

7. HANDLING AND STORAGE

Use in well ventilated area. Avoid inhaling vapor. Avoid contact with eyes. Keep container tightly closed when not in use. Store away from sources of heat or ignition. Storage area should be: - cool - dry - well ventilated - away from incompatible materials

		MATERIAL SAFETY DATA SHEET Merlin™ One-Step Prep Applicator
---	---	---

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards

Exposure Limits are listed below, if they exist.

Isopropyl alcohol

ACGIH: TLV 200ppm (980mg/m3) 8h TWA.
 ACGIH: STEL 400ppm (1225mg/m3) 15min TWA.
 OSHA: PEL 400ppm (980mg/m3) 8h TWA.
 Can be absorbed through skin.

Iodine

ACGIH: STEL 0.1 ppm (ceiling)
 OSHA PEL: 0.1 ppm (ceiling)

Engineering Control Measures

Good general room ventilation is expected to be adequate to control airborne levels.

Respiratory Protection

Respiratory protection not needed under normal conditions of use. The specific respirator selected must be based on the airborne concentration found in the workplace and must not exceed the working limits of the respirator.

Hand Protection

Chemical resistant gloves
 For isopropyl alcohol, gloves made of polyvinyl alcohol do not provide adequate protection.

Eye Protection

Chemical goggles or safety glasses with side shields

Body Protection

Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid contents in a plastic applicator with dispensing sponge
Color	Reddish
Odor	Pungent alcohol odor
pH	No data.
Specific Gravity	0.889
Boiling Range/Point (°C/F)	80 / 176
Melting Point (°C/F)	No data.
Flash Point (PMCC) (°C/F)	17 / 64
Vapor Pressure	Approx. 90 mmHg
Solubility in Water	Insoluble
Vapor Density (Air = 1)	2.1
Viscosity (cSt)	Not available

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

tyco Healthcare	KENDALL	MATERIAL SAFETY DATA SHEET Merlin™ One-Step Prep Applicator
---------------------------	----------------	---

10. STABILITY AND REACTIVITY

Conditions to Avoid

- Heat - High temperatures - Static discharge - Exposure to direct sunlight - Mechanical shock

Materials to Avoid

- Strong oxidizing agents - Acids - Halogens - Aluminum - Acid anhydrides - Isopropyl alcohol may attack some forms of plastic, rubber and coatings

Hazardous Polymerization

Will not occur.

Hazardous Decomposition Products

- oxides of carbon

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Low order of acute toxicity predicted. Material may be harmful by skin absorption.

Isopropyl Alcohol: Oral LD50 (rat) 5045 mg/kg. Dermal LD50 (rabbit) 12800mg/kg. Inhalation LCLO (rat) 1600ppm 4h

Chronic Toxicity/Carcinogenicity

This product is not expected to cause long term adverse health effects.

(Isopropyl Alcohol) IARC assessment: this product is not classifiable as to its carcinogenicity to humans (Group 3). Chronic/Subchronic studies resulted in adverse effects to: - liver - spleen - biochemical effects - brain tissue degeneration - changes in reflex behavior - sensory nerve damage

Genotoxicity

This product is not expected to cause any mutagenic effects.

Reproductive/Developmental Toxicity

This product is not expected to cause reproductive or developmental health effects.

(Isopropyl Alcohol) Experimental studies in animals have provided some evidence of embryo/fetotoxicity and birth defects only at doses producing marked maternal toxicity.

12. ECOLOGICAL INFORMATION

Mobility

(Isopropyl Alcohol)

If released to soil, isopropyl alcohol is expected to have very high mobility.

Persistence/Degradability

(Isopropyl Alcohol)

Isopropyl alcohol is readily degraded in aerobic aqueous systems.

Bio-accumulation

(Isopropyl Alcohol)

An estimated BCF of 3 suggests the potential for bioconcentration in aquatic organisms is low.

Ecotoxicity

May be harmful to aquatic organisms.

(Isopropyl Alcohol)

Tests on the following species gave a 96h LC50 of 1150mg/litre: - brown shrimp

Tests on the following species gave a 96h LC50 of 6.12-9.64mg/litre: - fathead minnows

13. DISPOSAL

Dispose of in accordance with all applicable local and national regulations. Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Not Regulated per 49 CFR 173.4 Small Quantity Exemption
Proper Shipping Name	None
Class	None
UN Number	None
Packing Group	None
Classification for AIR Transport(IATA):	Consult current IATA Regulations prior to shipping by air.

15. REGULATORY INFORMATION

EU Label Information

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.

EU Hazard Symbol and Indication of Danger

F - Highly flammable

Xi - Irritant

R phrases

R11 - Highly flammable.

R36 - Irritating to eyes.

R67 - Vapors may cause drowsiness and dizziness.

S phrases

S2 - Keep out of reach of children.

S7 - Keep container tightly closed.

S16 - Keep away from sources of ignition - No smoking.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

US REGULATIONS(Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS

TSCA Listing

This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Inventory.

EINECS Listing

All ingredients in this product are listed on the European Inventory of Existing Commercial Chemical Substances (EINECS) or are exempt from listing.

DSL (Canadian) Listing

All ingredients in this product are listed on the Domestic Substance List (DSL).

MA Right To Know Law

This product contains the following chemicals found on the Massachusetts Right to Know List: - Isopropyl Alcohol - Iodine

tyco
Healthcare

KENDALL

MATERIAL SAFETY DATA SHEET
Merlin™ One-Step Prep Applicator

15. REGULATORY INFORMATION

PA Right To Know Law

This product contains the following chemicals found on the Pennsylvania Hazardous Substance List:
- Isopropyl Alcohol - Iodine

NJ Right To Know Law

This product contains the following chemicals found on the NJ Right To Know Hazardous Substance List:
- Isopropyl Alcohol - Iodine

California Proposition 65

This product does not contain materials which the State of California has found to cause cancer, birth defects or other reproductive harm.

SARA Title III Sect. 302 (EHS)

This product does not contain any chemicals subject to SARA Title III Section 302.

SARA Title III Sect. 304

This product does not contain any chemicals subject to SARA Title III Section 304.

SARA Title III Sect. 311/312 Categorization

Immediate (Acute) Health Hazard

Delayed (Chronic) Health Hazard

Flammable

SARA Title III Sect. 313

This product does not contain a chemical which is listed in Section 313 at or above de minimis concentrations.

16. OTHER INFORMATION

NFPA Ratings

NFPA Code for Flammability - 3

NFPA Code for Health - 1

NFPA Code for Reactivity - 0

NFPA Code for Special Hazards - None

HMIS Ratings

HMIS Code for Flammability - 3

HMIS Code for Health - 1

HMIS Code for Reactivity - 0

HMIS Code for Personal Protection - See Section 8

Abbreviations

N/A: Denotes no applicable information found or available

CAS#: Chemical Abstracts Service Number

ACGIH: American Conference of Governmental Industrial Hygienists

OSHA: Occupational Safety and Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

NTP: National Toxicology Program

IARC: International Agency for Research on Cancer



R: Risk

S: Safety

R11 - Highly flammable.

R36 - Irritating to eyes.

R67 - Vapors may cause drowsiness and dizziness.

		MATERIAL SAFETY DATA SHEET Merlin™ One-Step Prep Applicator
---	---	---

16. OTHER INFORMATION

S2 - Keep out of reach of children.

S7 - Keep container tightly closed.

S16 - Keep away from sources of ignition - No smoking.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Prepared By: EnviroNet LLC.

The information and recommendations presented in this MSDS are based on sources believed to be accurate; therefore, The Kendall Company assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the information for their particular purposes.
