

SDS Date: February 2016

Section 1: Identification

IDENTIFICATION OF PREPARATION: Hygenall® HexOff™ Surface Cleaner.

USE OF PREPARATION: Hard Surface Decontamination and Cleaning of Heavy Metal Dusts

COMPANY IDENTIFICATION Hygenall Corporation

6275 University Drive

Suite 37-390

Huntsville, AL 35806

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations of Canada and the MSDS contains all the information required by the Controlled Products Regulations.

Section 2: Hazards Identification

Hazard categories: Skin Corrosion/Irritation 5; Eye Corrosion/Irritation 2A

<u>Hazard statements</u>: May cause skin irritation after long periods of dermal exposure, or people with sensitive skin, and serious eye irritation.

Signal word: Warning Pictogram: Exclamation

Prevention

Wash hands thoroughly after handling.

Wear protective gloves such as latex.

Wear eye protection such as safety glasses with side shields.

Response

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: get medical attention. Take off contaminated clothing and wash it before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage: None. Disposal: None.

EMERGENCY OVERVIEW: Clear, colorless liquid with a pleasant orange odor. May flash if vapors are ignited, but product will not burn.

POTENTIAL HEALTH EFFECTS: Contact with undiluted materials may cause eye, skin, and respiratory irritation.

ROUTES OF ENTRY: Dermal: YES Inhalation: POSSIBLE Ingestion: POSSIBLE Injection: UNLIKELY



PHONE: 866-750-0906

FAX:

202-449-9675

Section 3: Composition / Information on Ingredients

Ingredient	CAS NUMBER	EC NUMBER	Weight %
Citric Acid	77-92-9	201-069-1	<1%
Proprietary	Trade Secret	Not Listed	<3.5%
Isopropanol	67-63-0	200-661-7	<3%

The remaining ingredients are not reportable as described in Appendix D to Sec. 1910.1200 Table D.1.

Information regarding proprietary ingredients is available from the manufacturer upon request. All ingredients are listed in TSCA inventory.

Section 4: First Aid Measures

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, lifting upper and lower eyelids occasionally. If eye irritation persists: Get medical attention.

Skin Contact: Wash with plenty of soap and water, then rinse the exposed area thoroughly with water. If skin irritation occurs: get medical attention. Take off contaminated clothing and wash it before reuse.

Inhalation: Move the exposed person to fresh air. If symptoms persist, get medical attention.

Ingestion: Do NOT induce vomiting. Drink plenty of water. Seek medical advice.

Section 5: Fire-Fighting Measures

EXTINGUISHING MEDIA: Any **Special Firefighting Procedures:** None.

Unusual Fire and Explosion Hazards: None.

Section 6: Accidental Release Measures

Steps to be taken if Material is Released or Spilled: Avoid contact with eyes. 5 gallons or less may be washed to a sanitary sewer with a large amount of water. Larger spills can be collected into clean pails or drums for proper disposal. Large quantities may be washed to a sanitary sewer with plenty of water.

Section 7: Handling and Storage

Store in a tightly closed container in a dry secure area inaccessible to children, and protect from heating and freezing. Empty containers retain product residue. Observe all precautions in this sheet. Avoid contact with eyes. Do not eat, drink, or smoke while handling this product. Wear appropriate protective equipment. **KEEP OUT OF THE REACH OF CHILDREN.**

Section 8: Exposure Controls / Personal Protection

None of the ingredients have known exposure limits or they are below OSHA reportable levels.

Ventilation: None.

Respiratory Protection: None when used as directed

<u>Gloves:</u> Persons with sensitive skin or who use the product for prolonged periods may wish to use rubber or latex gloves. Disposable latex gloves are acceptable.

Eye Protection: if eye contact with product is possible, wear safety glasses with side shields

	EXPOSURE LIMITS*		
MATERIAL	OSHA PEL ^(a)	ACGIH TLV ^(b)	
Isopropyl Alcohol	400 ppm	TWA 200 PPM, STEL 400 ppm	

^{*}See Section 15 for additional Occupational Exposure Limits (OELs).

(a) U.S. Department of Labor, Occupational Safety and Health Administration, permissible exposure limit (PEL); (b) American Conference of Governmental Industrial Hygienists', threshold limit value (TLV)

Section 9: Physical and Chemical Properties

Appearance: A colorless liquid with slight orange odor.

Odor Threshold: Not Available

pH: 6.0 ± 0.5

Melting Point: Not Applicable Freezing Point: Not Available

Boiling Point: Approx. 100°C or 212°F

Boiling Range: Not Available
Flash Point: Not Available
Evaporation Rate: ~1 (Water = 1)
Flammability: (solid, gas): Not Applicable

Lower Explosive Limit (LEL): None Upper Explosive Limit (UEL): None

Vapor Pressure: Not Available
Vapor Density: Not Available
Relative Density (Specific Gravity): Approx. 1.0
Solubility(ies): in Water: 100%

Partition Coefficient: Not Available Viscosity of Solution: Same as water

Total Volatile Organic Compounds (TVOC) (G/L): Not Available

Section 10: Stability and Reactivity

This material is stable under expected conditions of use, handling and storage.

Incompatibility: None

Hazardous Decomposition Products: None

Section 11: Toxicological Information

NO DATA AVAILABLE ON THE SPECIFIC MIXTURE.

Primary Routes of Entry: X Skin contact; X Skin absorption; ____ inhalation; X Ingestion

Potential heal Effects:

Eyes- Causes irritation, redness, tearing.

Skin – May cause irritation, reddening, dermatitis.

Swallowing - Minimal toxicity.

Breathing - Excessive inhalation of sprayed mist may cause irritation.

CITRIC ACID

NIOSH RTECS No.: GE7350000

Acute Effects of Overexposure: May cause eye, skin, and respiratory and digestive tract irritation.

<u>Chronic Effects of Overexposure</u>: None expected. Target Organs: Eyes, skin, respiratory system.

Carcinogenicity: Not listed as a carcinogen by IARC, ACGIH, NTP, OSHA, or NIOSH.

<u>Toxicity Data</u>: Rat-Oral $LD_{50} = 3,000 \text{ mg/kg}$

ISOPROPYL ALCOHOL

NIOSH RTECS No.: NT8050000

Acute Effects of Overexposure: May cause eye, skin, and respiratory and digestive tract irritation.

<u>Chronic Effects of Overexposure</u>: None expected. <u>Target Organs</u>: Eyes, skin, respiratory system.

Carcinogenicity: Not listed as a carcinogen by IARC, ACGIH, NTP, OSHA, or NIOSH.

Toxicity Data:

Rat-Oral LD₅₀ = 5,045 mg/kg Mouse-Oral LC₅₀ = 3,600 mg/kg

Human-Oral $LD_{Lo} = 14,432 \text{ mg/kg}$ (Difficulty in breathing; coma) Human-Oral $LD_{Lo} = 3,570 \text{ mg/kg}$ (Respiratory depression)

Human-Oral LD_{Lo} = 5,272 mg/kg (Chronic pulmonary edema or congestion)

Human-Oral LD_{Lo} = 1,537 mg/kg (Nausea or vomiting)

Rabbit-Dermal $LD_{50} = 12,800 \text{ mg/kg}$

Rabbit-Skin irritation = Mild

Rabbit-Eye irritation = Severe in one study; moderate in two other studies.

PROPRIETARY INGREDIENT

NIOSH RTECS No.: Not Listed

Acute Effects of Overexposure: May cause eye and skin irritation.

Chronic Effects of Overexposure: No information available in sources utilized.

Target Organs: Eyes, skin.

Carcinogenicity: Not listed as a carcinogen by IARC, ACGIH, NTP, OSHA, or NIOSH.

<u>Toxicity Data</u>: Rat-Oral $LD_{50} > 5,000 \text{ mg/kg}$

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Section 12: Ecological information

NO DATA AVAILABLE ON THE SPECIFIC MIXTURE. Do not dispose of in the environment.

CITRIC ACID

Ecotoxicity: LC₅₀(48h) 440 mg/l Carp

Mobility: Soluble in water.

<u>Persistence and Degradability</u>: No information available in sources utilized. <u>Bioaccumulation Potential</u>: No information available in sources utilized.

PROPRIETARY INGREDIENT

No known significant effects or critical hazards.

ISOPROPYL ALCOHOL

LC50 (96hr) fathead minnow (29 days old): 94900-10400 mg/L. Cond: Flow-through, 24.4-24.6 degrees C, pH 7.09, 52.5 mg/L CaCO3.

LC50 (96hr) fathead minnow (31 days old): 61200-65500 mg/L. Cond: Flow-through, 24.6 degrees C, pH 7.87, 44 mg/L CaCO3.

EC50 (5 min) Photobacterium phosphoreum: 35390 ppm Microtox test.

Section 13: Disposal Considerations

<u>Waste Disposal Method:</u> Less than 5 gallons may be washed to a sanitary sewer with a large amount of water. More than 5 gallons should be washed to the sewer with a large quantity of water.

Section 14: Transport Information

D.O.T. Hazard Class: Not considered hazardous by D.O.T., I.M.C.O., I.A.T.A. or U.N.

Section 15: Regulatory Information

CANADIAN ENVIRONMENTAL PROTECTION ACT: All of the components of this product are either listed or exempt on the Canadian Domestic Substances List (DSL).

EPA TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS: All of the components of this product are listed on the US TSCA Inventory. Isopropyl alcohol is subject to Health and Safety Data Reporting (40 CFR 716.120(a)), and to a Chemical Test Rule (40CFR 799.2325). TSCA – Section 12(b) – Export Notification (Isopropyl alcohol).

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS): The Proprietary Ingredient is not listed on the EINECS inventory. SARA 312: Isopropyl Alcohol - Present.

SARA 313: Isopropyl Alcohol.

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

X Hazardous _ Non-Hazardous

SARA HAZARD CATEGORIES (40 CFR 370)

X Acute _Chronic XFire _Pressure _Reactive _None

SARA HAZARD CATEGORIES (40 CFR 370)

X Acute Chronic XFire Pressure Reactive None

WORKPLACE HAZRDOUS MATERIALS INFORMATION SYSTEM (CPR SECTION (33))

X Controlled Product – Classification: D2B, B2....._Not a Controlled Product

STATE REGULATIONS

California Proposition 65: Ethylene oxide (CAS# 75-21-8 <10 ppm, 1, 4 Dioxane (CAS# 123-91-1) <100 ppm. Contains Isopropyl Alcohol.

May contain trace levels of formaldehyde and acetaldehyde.

Section 16: Other Information

NFPA®: H:1 F:0 I:0

HMIS® **III:** H:1 F:0 P:0

These ratings estimates are to be used only with a full implemented training program in the workplace. NFPA® is a mark registered by the NFPA. HMIS® is a mark registered by the NPCA.

Current SDS Revision Date: February 2016

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