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STATE OF HAWAI`I
DEPARTMENT OF EDUCATION
P.O. BOX 2360
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OFFICE OF FACILITIES AND OPERATIONS

October 8, 2020

TO: Deputy Superintendent
Complex Area Superintendents (Oahu)
Principals (Oahu)
Administrative Services Assistants (Oahu)
Complex Area Business Managers (Oahu)
State Charter School Commission

FROM: Randall M. Tanaka
Assistant Superintendent

SUBJECT: **Second Delivery of Bulk Hand Sanitizer to Oahu Schools**

The Hawaii State Department of Education, Office of Facilities and Operations (OFO) has obtained a second allocation of bulk sanitizer (75 percent isopropyl alcohol) from the Hawaii Emergency Management Agency. The OFO has arranged for Enviroservices & Training Center, LLC to fill and distribute five gallon canisters to schools on Oahu. Delivery of the hand sanitizer will begin the week of October 26, 2020 and is expected to be completed within approximately two weeks. This delivery is separate and in addition to the "60 Operational Days' Worth of Personal Protective Equipment and Industrial Hygiene Supplies" described in the OFO memo dated September 30, 2020.

Please notify schools in your complex area (Attachment 1) to expect delivery of bulk hand sanitizer and provide a copy of the attached instructions and safety information (Attachment 2).

Should you have any questions, please contract Gary Bignami, Program Specialist of the Environmental Services Unit, at 784-5067 or via email at gary.bignami@k12.hi.us.

RMT:gb
Attachments

c: Superintendent
Office of Facilities and Operations
Facilities Development Branch

code	name
100	Aina Haina Elementary
101	Ala Wai Elementary
102	Aliiolani Elementary
103	Kula Kaiapuni O Anuenue
104	Central Middle
105	Dole Middle
106	Farrington High
107	Fern Elementary
108	Hahaione Elementary
109	Hokulani Elementary
110	Jarrett Middle
111	Jefferson Elementary
112	Kaahumanu Elementary
113	Kaewai Elementary
114	Kahala Elementary
115	Kaimuki High
116	Kaimuki Middle
117	Kaiulani Elementary
118	Kalakaua Middle
119	Kalani High
120	Kalihi Elementary
121	Kalihi Kai Elementary
122	Kalihi Uka Elementary
123	Kalihi Waena Elementary
124	Kapalama Elementary
125	Kauluwela Elementary
126	Kawananakoa Middle
127	Koko Head Elementary
128	Kuhio Elementary
129	Lanakila Elementary
130	Liholiho Elementary
131	Likelike Elementary
133	Linapuni Elementary
134	Lincoln Elementary
135	Lunalilo Elementary
136	Maemae Elementary
137	Manoa Elementary
138	McKinley High
139	Niu Valley Middle
140	Noelani Elementary
141	Nuuanu Elementary
142	Palolo Elementary
143	Pauoa Elementary
145	Puuhale Elementary
146	Roosevelt High
147	Royal School
148	Stevenson Middle
149	Waialae Elementary PCS
150	Waikiki Elementary
152	Washington Middle
153	Wilson Elementary
154	Kaiser High
155	Kamiloiki Elementary
200	Aiea Elementary
201	Aiea Intermediate
202	Aiea High
203	Aliamanu Elementary
204	Aliamanu Middle
206	Haleiwa Elementary
207	Inouye Elementary
208	Helemano Elementary
209	Hickam Elementary
210	Iliahi Elementary
211	Kaala Elementary
212	Kipapa Elementary
214	Leilehua High
215	Makalapa Elementary
216	Mililani High
217	Moanalua Elementary
218	Moanalua High
219	Moanalua Middle
220	Mokulele Elementary
221	Nimitz Elementary
222	Pearl Harbor Elementary
223	Pearl Harbor Kai Elementary
224	Radford High
225	Red Hill Elementary
226	Solomon Elementary
227	Scott Elementary
228	Shafter Elementary
229	Wahiawa Elementary
230	Wahiawa Middle
231	Waialua Elementary
232	Waialua High and Intermediate
233	Waimalu Elementary
234	Mililani Waena Elementary
235	Webling Elementary
236	Wheeler Elementary
237	Wheeler Middle
238	Mililani Middle
239	Salt Lake Elementary
240	Mililani Ike Elementary
241	Mililani Mauka Elementary
242	Mililani Uka Elementary
243	Pearl Ridge Elementary
250	Ahrens Elementary
251	Barbers Point Elementary
252	Campbell High
253	Ewa Elementary
254	Ewa Beach Elementary
255	Highlands Intermediate
256	Iroquois Point Elementary
257	Maili Elementary
258	Makaha Elementary
259	Makakilo Elementary
260	Manana Elementary
261	Nanaikapono Elementary
262	Nanakuli Elementary
263	Nanakuli High and Intermediate
264	Palisades Elementary
265	Pearl City Elementary
266	Pearl City High
267	Pearl City Highlands Elementary
268	Lehua Elementary
269	Pohakea Elementary
270	Waianae Elementary
271	Leihoku Elementary
272	Waianae High
273	Waianae Intermediate
274	Waipahu Elementary
275	Kamaile Academy PCS
276	Honowai Elementary
277	Waipahu High
278	Waipahu Intermediate
279	Ilima Intermediate
280	Holomua Elementary
281	Kaimiloa Elementary
282	Kapolei Elementary
283	Kanoelani Elementary
285	Momilani Elementary
286	Mauka Lani Elementary
287	Kaleiopuu Elementary
288	Waiau Elementary
290	Waikele Elementary
291	Kapolei Middle
292	Kapolei High
293	Hookele Elementary
294	Keoneula Elementary
296	Ewa Makai Middle
297	Honouliuli Middle
300	Aikahi Elementary
301	Castle High
302	Enchanted Lake Elementary
303	Hauula Elementary
304	Heeia Elementary
305	Kaaawa Elementary
306	Kahaluu Elementary
307	Kahuku High and Intermediate
308	Kailua Elementary
309	Kailua High
310	Kailua Intermediate
311	Kainalu Elementary
312	Kalaheo High
313	Kaneohe Elementary
314	Puohala Elementary
315	Kapunahala Elementary
317	Keolu Elementary
318	King Intermediate
319	Laie Elementary
320	Kaohao Public Charter
321	Maunawili Elementary
322	Mokapu Elementary
323	Parker Elementary
324	Pope Elementary
325	Sunset Beach Elementary
326	Waiahole Elementary
327	Waimanalo Elementary and Intermediate
330	Kaelepulu Elementary
331	Kahuku Elementary
335	Ahuimanu Elementary
470	Hawai`i School for the Deaf and the Blind
475	Olomana School
	Charter Schools
540	Halau Ku Mana PCS
541	Voyager PCS
543	University Laboratory
544	Myron B. Thompson Academy
545	Ka Waihona O Ka Naauao PCS
546	Hakipuu Learning Center PCS
547	Ke Kula 'o Samuel M. Kamakau LPCS
550	Malama Honua PCS
551	Hawai'i Technology Academy PCS
553	Kamalani Academy PCS
555	Kapolei Charter PCS
567	SEEQS PCS
568	DreamHouse 'Ewa Beach

Isopropyl Alcohol Antiseptic 75% Topical Solution

Please Note: The content provided below is to compliment, not replace or supersede, the safe handling and product information contained within the Safety Data Sheet (SDS) and the additional Storage and Handling Recommendations label affixed to the original package container.

It is strongly recommended before handling/transferring this material you familiarize yourself with the information contained within the SDS and Additional Handling Considerations label as well as with any applicable local regulations and requirements.

Drug Facts

Hand Sanitizer, Non-sterile Solution

Active Ingredient(s)	**Purpose**
Isopropyl alcohol 75% v/v	Antiseptic

Use(s)
Health care personnel hand rub to help reduce bacterial that can potentially cause disease.

Warnings
For external use only. Flammable. Keep away from heat or flame.

Do not use

- On children less than 2 months of age.
- On open skin wounds.

When using this product keep out of eyes, ears and mouth. In case of contact with eyes, rinse eyes thoroughly with water.

Stop use and asks a doctor if irritation or rash occurs. These may be signs of a serious condition.

Keep out of reach of children. If swallowed, get medical help or contact a Poison Control Center right away.

Directions

- Place enough product on hands to cover all surfaces. Rub hands together until dry.
- Supervise children under age 6 years of age when using this product.

Other Information

- Store between 15-30 °C (59-86 °F).
- Avoid freezing and excessive heat above 40 °C (104 °F).

Inactive ingredients glycerin, hydrogen peroxide, purified water USP.

Safety Information

Flammability – Hand Sanitizer is highly flammable.

- Keep away from heat/sparks/open flames. Do not smoke around it.
- Keep container tightly closed when not transferring.
- Transfer in well-ventilated areas (outside, open windows, increase air circulation).
- Store in cool, well-ventilated area.

Protective Equipment – Make sure to use appropriate PPE when handling the hand sanitizer.

- Chemical goggles are recommended. Fluids can splash around glasses.
- Wear appropriate gloves when handling. Although the product is made for use on hands, repeated exposure may cause skin dryness or cracking.
- Ensure adequate ventilation when transferring to smaller containers.

PLEASE REVIEW ATTACHED SDS before proceeding.

Procedure for Transfer from 5 Gallon Container to Portable Containers

- Use the hand pump provided with the first delivery in August.
- Transfer in well-ventilated areas (outside, open windows, increase air circulation).
- Keep away from heat/sparks/open flames. (Smoking is not allowed on school campuses).
- Make sure hand pump is in closed position (handle retracted).
- Unscrew cap and attach hand pump (screws on in place of cap).
- Place receiving container under the spout of the hand pump and carefully pull pump handle to dispense hand sanitizer. **Label portable containers as shown below**.
- When finished filling portable containers, move 5 gallon container to well ventilated, cool storage area away from heat/sparks/open flames.
- When empty, rinse the 5 gallon container with water and drain. Allow the inside of the container to dry before replacing the cap.
- Contact the Environmental Services Unit at (808) 784-5067 to request refills (subject to availability through Hawaii Emergency Management Agency).

HAND SANITIZER

75% Isopropyl Alcohol

Flammable. Keep away from children.

Drug Facts

Active ingredient[s] ***Purpose***
Isopropyl alcohol 75% v/v ..... Antiseptic

Use[s]
Health care personnel hand rub to help reduce bacteria that potentially can cause disease.

Warnings

For external use only. Flammable. Keep away from heat or flame

Do not use

- on children less than 2 months of age
- on open skin wounds

When using this product keep out of eyes, ears, and mouth. In case of contact with eyes, rinse eyes thoroughly with water.

Stop use and ask a doctor if irritation or rash occurs. These may be signs of a serious condition.

Keep out of reach of children. If swallowed, get medical help or contact a Poison Control Center right away.

Directions

- Place enough product on hands to cover all surfaces. Rub hands together until dry.
- Supervise children under 6 years of age when using this product

Other information

- Store between 15-30C (59-86F)
- Avoid freezing and excessive heat above 40C (104F)

Inactive ingredients glycerin, hydrogen peroxide, purified water USP

About this product:
In an effort to respond to the COVID-19 pandemic, this product was manufactured at the ExxonMobil Baton Rouge Chemical Plant and bottled at the ExxonMobil Port Allen Lubricant Plant. ExxonMobil continues to produce products critical in this time of need including Isopropyl Alcohol for sanitizing, polypropylene for medical gowns and masks, fuel for supporting emergency vehicles, and lubricants such as Mobil 1™ and Mobil Delvac™ for protecting the engines in the vehicles delivering essential items.

Hand Sanitizer (IPA Based)

DGN No 7205442XUS - **DANGER**

H225: Highly flammable liquid and vapor.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.

P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking. P233: Keep container tightly closed. P240: Ground / bond container and receiving equipment. P241: Use explosion-proof electrical, ventilating, and lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing mist / vapours. P264: Wash skin thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves and eye / face protection.P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313: If eye irritation persists: Get medical advice/attention. P370 + P378: In case of fire: Use water fog, alcohol-resistant foam, dry chemical, or carbon dioxide (CO2) to extinguish.P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.P501: Dispose of contents and container in accordance with local regulations.

EXXON MOBIL
22777 Springwoods Village Parkway
Spring, TX 77389 USA

NOT LABELED FOR SALE

Manufactured in Baton Rouge and donated by ExxonMobil

ExxonMobil

Isopropyl Alcohol Antiseptic 75% Topical Solution

Hand Sanitizer
Non-sterile Solution

~~330 Gallon Tote~~

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: HAND SANITIZER
Product Description: Chemical Mixture

Intended Use: Personal care

COMPANY IDENTIFICATION

Supplier: **EXXONMOBIL CHEMICAL COMPANY**
SDS – LOC. 106
22777 Springwoods Village Parkway
Spring, TX 77389-1425 USA

24 Hour Health Emergency	(800) 726-2015
Transportation Emergency Phone	(800) 424-9300 or (703) 527-3887 CHEMTREC
Product Technical Information	(832) 624-8500
Supplier General Contact	(832) 624-8500

SECTION 2 HAZARDS IDENTIFICATION

This material is hazardous according to regulatory guidelines (see (M)SDS Section 15).

CLASSIFICATION:

Flammable liquid: Category 2.
Eye irritation: Category 2A. Specific target organ toxicant (central nervous system): Category 3.

LABEL:
Pictogram:

Signal Word: Danger

Hazard Statements:
H225: Highly flammable liquid and vapor. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.

Precautionary Statements:
P210: Keep away from heat/sparks/open flames/hot surfaces. -- No smoking. P233: Keep container tightly closed. P240: Ground / bond container and receiving equipment. P241: Use explosion-proof electrical, ventilating, and lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P261: Avoid breathing mist / vapours. P264: Wash skin thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P280: Wear protective gloves and eye / face protection.P303 + P361 + P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312: Call a POISON CENTER or doctor/physician if you feel unwell. P337 + P313: If eye irritation persists: Get medical advice/attention. P370 + P378: In case of fire: Use water fog, alcohol-resistant foam, dry chemical, or carbon dioxide (CO2) to extinguish.P403 + P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.P501: Dispose of contents and container in accordance with local regulations.

Contains: ISOPROPYL ALCOHOL

Other hazard information:

HAZARD NOT OTHERWISE CLASSIFIED (HNOC): None as defined under 29 CFR 1910.1200.

PHYSICAL / CHEMICAL HAZARDS

Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited.

HEALTH HAZARDS

Repeated exposure may cause skin dryness or cracking. May be irritating to nose, throat, and lungs. If swallowed, may be aspirated and cause lung damage.

ENVIRONMENTAL HAZARDS

No significant hazards.

NFPA Hazard ID:	Health:	2	Flammability:	3	Reactivity:	0
HMIS Hazard ID:	Health:	2	Flammability:	3	Reactivity:	0

NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a mixture.

Hazardous Substance(s) or Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Hazard Codes
1,2,3-PROPANETRIOL	56-81-5	1 - 2.2%	None
HYDROGEN PEROXIDE	7722-84-1	0.2 - 0.25%	H271(L), H302, H335, H314(1A), H401, H412
ISOPROPYL ALCOHOL	67-63-0	>= 69 %	H225, H305, H336, H319(2A)

* All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with applicable provisions of paragraph (i).

SECTION 4 FIRST AID MEASURES

INHALATION

Immediately remove from further exposure. Get immediate medical assistance. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. Give supplemental oxygen, if available. If breathing has stopped, assist ventilation with a mechanical device.

SKIN CONTACT

Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.

EYE CONTACT

Flush thoroughly with water for at least 15 minutes. Get medical assistance.

INGESTION

Seek immediate medical attention. Do not induce vomiting.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, alcohol-resistant foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water or Regular Foam

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Highly flammable. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Firefighters should consider protective equipment indicated in Section 8.

Hazardous Combustion Products: Incomplete combustion products, Oxides of carbon, Smoke, Fume

FLAMMABILITY PROPERTIES

Flash Point [Method]: 12°C (54°F) [ASTM D-56]
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: 399°C (750°F) [ASTM E659]

SECTION 6 ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

SPILL MANAGEMENT

Land Spill: Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do it without risk. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Prevent entry into waterways, sewer, basements or confined areas. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Large Spills: Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Water Spill: Stop leak if you can do it without risk. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Warn other shipping. This product emulsifies, disperses or is miscible in water. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7 HANDLING AND STORAGE

HANDLING

Avoid contact with eyes. Prevent exposure to ignition sources, for example use non-sparking tools and explosion-proof equipment. Potentially toxic/irritating fumes/vapors may be evolved from heated or agitated material. Use only with adequate ventilation. Use proper bonding and/or ground procedures. However, bonding and grounds may not eliminate the hazard from static accumulation. Peroxides may form upon prolonged storage. Exposure to light, heat or air significantly increases peroxide formation. If evaporated to a residue, the mixture of peroxides residue and material vapor may explode when exposed to heat or shock. Prevent small spills and leakage to avoid slip hazard.

Loading/Unloading Temperature: [Ambient]

Transport Temperature: [Ambient]
Transport Pressure: [Ambient]

Static Accumulator: This material is not a static accumulator.

STORAGE

Ample fire water supply should be available. A fixed sprinkler/deluge system is recommended. Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area. Outside or detached storage preferred. Storage containers should be grounded and bonded. Fixed storage containers, transfer containers and associated equipment should be grounded and bonded to prevent accumulation of static charge.
Storage Temperature: [Ambient]
Storage Pressure: [Ambient]

Suitable Containers/Packing: Tankers; Tank Trucks; Drums; Barges; Tank Cars; Tote Bins; Bottles
Suitable Materials and Coatings (Chemical Compatibility): Carbon Steel; Stainless Steel; Polyester; Teflon; Polyethylene; Polypropylene; Epoxy Phenolic; Copper Bronze; Zinc; Vinyls
Unsuitable Materials and Coatings: Butyl Rubber; Natural Rubber; Ethylene-proplyene-diene monomer (EPDM); Polystyrene; Aluminum; Cast iron; Monel

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit / Standard			NOTE	Source
1,2,3-PROPANETRIOL	Respirable fraction.	TWA	5 mg/m3		N/A	OSHA Z1
1,2,3-PROPANETRIOL	Total dust.	TWA	15 mg/m3		N/A	OSHA Z1
HYDROGEN PEROXIDE		TWA	1.4 mg/m3	1 ppm	N/A	OSHA Z1
HYDROGEN PEROXIDE		TWA	1 ppm		N/A	ACGIH
ISOPROPYL ALCOHOL		TWA	980 mg/m3	400 ppm	N/A	OSHA Z1
ISOPROPYL ALCOHOL		STEL	400 ppm		N/A	ACGIH
ISOPROPYL ALCOHOL		TWA	200 ppm		N/A	ACGIH

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

Biological limits

Substance	Specimen	Sampling Time	Limit	Determinant	Source
ISOPROPYL ALCOHOL	Urine	End of shift at end of work wk	40 mg/l	Acetone	ACGIH BELs (BEIs)

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion-proof ventilation equipment.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Half-face filter respirator

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Eye Protection: Chemical goggles are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

GENERAL INFORMATION

Physical State: Liquid
Color: Colorless

Odor: Alcohol
Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 20 °C): < 1
Flammability (Solid, Gas): N/A
Flash Point [Method]: 12°C (54°F) [ASTM D-56]
Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D
Autoignition Temperature: 399°C (750°F) [ASTM E659]
Boiling Point / Range: 82°C (180°F) [ASTM D1078]
Decomposition Temperature: N/D
Vapor Density (Air = 1): N/D
Vapor Pressure: N/D
Evaporation Rate (n-butyl acetate = 1): N/D
pH: N/D
Log Pow (n-Octanol/Water Partition Coefficient): N/D
Solubility in Water: Readily
Viscosity: N/D
Oxidizing Properties: See Hazards Identification Section.

OTHER INFORMATION

Freezing Point: N/D
Melting Point: N/A

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: See sub-sections below.

STABILITY: Under normal storage conditions peroxides may accumulate and explode when subjected to heat or shock. Distillation or evaporation increases peroxide formation and increases the explosion hazard.

CONDITIONS TO AVOID: Avoid heat, sparks, open flames and other ignition sources.

MATERIALS TO AVOID: Aldehydes, Alkanolamines, Amines, Caustics, Chlorinated Compounds, Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data for material.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs.
Ingestion	

Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on assessment of the components.
Skin Corrosion/Irritation: No end point data for material.	May dry the skin leading to discomfort and dermatitis. Based on assessment of the components.
Eye	
Serious Eye Damage/Irritation: No end point data for material.	Irritating and will injure eye tissue. Based on assessment of the components.
Sensitization	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on assessment of the components.
Aspiration: No end point data for material.	May be harmful if swallowed and enters airways. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: No end point data for material.	Not expected to be a germ cell mutagen. Based on assessment of the components.
Carcinogenicity: No end point data for material.	Not expected to cause cancer. Based on assessment of the components.
Reproductive Toxicity: No end point data for material.	Not expected to be a reproductive toxicant. Based on assessment of the components.
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	May cause drowsiness or dizziness. Based on assessment of the components.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on assessment of the components.

OTHER INFORMATION

For the product itself:

Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects.

Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

The following ingredients are cited on the lists below: None.

--REGULATORY LISTS SEARCHED--

1 = NTP CARC	3 = IARC 1	5 = IARC 2B
2 = NTP SUS	4 = IARC 2A	6 = OSHA CARC

SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data for the material, components of the material, or for similar materials, through the application of bridging principals.

ECOTOXICITY

Material -- Not expected to be harmful to aquatic organisms.

MOBILITY

Components -- Expected to remain in water or migrate through soil.

SECTION 13 DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

RCRA Information: Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity or toxicity as determined by the Toxicity Characteristic Leaching Procedure (TCLP). Potential RCRA characteristics: IGNITABILITY.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14 TRANSPORT INFORMATION

LAND (DOT)

Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL)
Hazard Class & Division: 3
ID Number: 1993
Packing Group: II
ERG Number: 128
Label(s): 3
Transport Document Name: UN1993, FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL), 3, PG II

LAND (TDG)

Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL)
Hazard Class & Division: 3
UN Number: 1993
Packing Group: II
Special Provisions: 16, 150

SEA (IMDG)

Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL)
Hazard Class & Division: 3
EMS Number: F-E,S-E
UN Number: 1993

Packing Group: II
Marine Pollutant: No
Label(s): 3
Transport Document Name: UN1993, FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL), 3, PG II, (12°C c.c.)

AIR (IATA)

Proper Shipping Name: FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL)
Hazard Class & Division: 3
UN Number: 1993
Packing Group: II
Label(s) / Mark(s): 3
Transport Document Name: UN1993, FLAMMABLE LIQUIDS, N.O.S. (ISOPROPYL ALCOHOL), 3, PG II

SECTION 15 REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200.

Listed or exempt from listing/notification on the following chemical inventories: AIIC, DSL, ENCS, IECSC, KECI, PICCS, TCSI, TSCA

SARA 302

Chemical Name	CAS Number	Typical Value	Component TPQ
HYDROGEN PEROXIDE	7722-84-1	0.21 %weight	1000 LBS

SARA (311/312) REPORTABLE GHS HAZARD CLASSES: Flammable (gases, aerosols, liquids, or solids), Serious eye damage or eye irritation, Specific Target Organ toxicity (single or repeated exposure)

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The following ingredients are cited on the lists below:

Chemical Name	CAS Number	List Citations
1,2,3-PROPANETRIOL	56-81-5	4, 13, 16, 17
HYDROGEN PEROXIDE	7722-84-1	17
ISOPROPYL ALCOHOL	67-63-0	1, 4, 13, 16, 17, 18, 19

--REGULATORY LISTS SEARCHED--

1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16 OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):
H225: Highly flammable liquid and vapor; Flammable Liquid, Cat 2
H271: May cause fire or explosion; strong oxidizer; Oxidizing Liquid, Cat 1
H302: Harmful if swallowed; Acute Tox Oral, Cat 4
H305: May be harmful if swallowed and enters airways; Aspiration, Cat 2
H314(1A): Causes severe skin burns and eye damage; Skin Corr/Irritation, Cat 1A
H319(2A): Causes serious eye irritation; Serious Eye Damage/Irr, Cat 2A
H335: May cause respiratory irritation; Target Organ Single, Resp Irr
H336: May cause drowsiness or dizziness; Target Organ Single, Narcotic
H401: Toxic to aquatic life; Acute Env Tox, Cat 2
H412: Harmful to aquatic life with long lasting effects; Chronic Env Tox, Cat 3

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:
Section 05: Fire Fighting Measures - Inappropriate Extinguishing Media information was modified.
Section 07: Loading/Unloading Temperature C(F) information was added.
Section 07: Materials/Coatings - Suitable information was added.
Section 07: Materials/Coatings - Unsuitable information was added.
Section 07: Storage Pressure kPa information was added.
Section 07: Suitable Containers information was added.
Section 07: Transport Pressure kPa information was added.
Section 07: Transport Temperature C(F) information was added.
Section 15: National Chemical Inventory Listing information was modified.

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Internal Use Only
MHC: 2A, 0, 0, 2, 1, 1

DGN: 7205849HUS (1030500)
