Array® Instant Hand Sanitizer

CellEra, LLC

Safety Data Sheet

Revision Date: September 8, 2015

Complies with 29 CFR 1910.1200 (HCS) GHS

Section 1: Product & Company Identification

1.1 Product Identifiers:

Product Name:	Array Instant Hand Sanitizer	
Product Size:	Catalog Number:	Package:
4 oz (118 ml)	44504	bottle

1.2 Relevant Identified Uses:

Identified Uses: Antiseptic; hand sanitizer to help reduce bacteria on the skin that could cause disease.

Application Method: Place enough product in your palm to thoroughly cover your hands, rub together briskly until dry.

1.3 Details of the Supplier of the Safety Data Sheet:

Company: CellEra, LLC

Address: 1045 Reed Road, Unit C
Monroe, OH 45050 USA

Telephone Number: 513-539-1500

Fax Number 513-539-1501

Section 2: Hazards Identification

2.1 Classification of the Substance or Mixture:

Flam. Liq. 3; H226 Flammable liquid & vapor

2.2 GHS Label Elements, including Precautionary Statements:

Not required on OTC product or case labels per OSHA Hazard Communication System (b)(5).

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS:

Warning Label H226: Flammable liquid and vapor

Prevention P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Prevention P235: Keep cool.

Prevention P240: Ground/bond container and receiving equipment.

Prevention P241: Use explosion-proof electrical/ventilating/light/equipment

Prevention P242: Use only non-sparking tools.

Prevention P243: Take precautionary measures against static discharge.

Prevention P280: Wear protective gloves/eye protection/face protection.

Response P303, 361 & 353: If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Response P370 & 378: In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

Storage P403 & 233: Store in a well ventilated place. Keep container tightly closed.

Disposal P501: Dispose of contents/container in accordance with local/national regulations.

Section 3: Composition/Information on Ingredients

3.1 This product contains the following substances that present a hazard within the meaning of the relevant State & Federal

Ingredient	Chemical Designations	Weight %	GHS Classification	Notes
Ethanol	CAS Number: 0000064-17-5	50-75%	Flammable Liquid 2; H225	1&2 below
Isopropyl Alchol	CAS Number: 0000067-63-0	1-10%	Flammable Liquid 2; H225 Eye Irritant 2; H319 STOT SE 3; H336	1&2 below

Notes: 1) Substance classified with a health or environmental hazard.
2) Substance with a workplace exposure limit.

Full texts of GHS Classification Phrases:

H225: Highly flammable liquid and vapor.

H319: Causes serious eye irritation.
H336: May cause drwsiness and dizziness.

Section 4: First Aid Measures

4.1 Description of First Aid Measures

General: In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

If inhaled: If breathing is difficult, move to fresh air.

In case of skin contact: This product is designed for skin contact. If irritated, flush with water.

In case of eye contact: Do not rub eyes. Flush eyes thoroughly with water. If irritation persists, contact a physician.

If swallowed: Abnormal entry route & may cause diarrhea. Do not induce vomiting. Contact physician or poison control center. Do not give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute & delayed

Overview:

Health Hazards (Acute & Chronic): Used as a hand sanitizer. Vapor irritates eyes. High concentration of vapor can irritate respiratory tract, are anesthetic and may cause CNS depression.

Signs and Symptoms of Exposure: Confusion, headache, dizziness, and Nausea.

Medical Conditions Generally Aggravated by Exposure: Pre-existing eye and respiratory disorders may be aggravated by exposure.

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for more details.

Section 5: Fire-Fighting Measures

5.1 Extinguishing Media

Carbon dioxide (CO_2), dry chemical powder or foam, sand.

5.2 Special Hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Keep away from heat, sparks, open flames, hot surfaces. No smoking.

Keep cool.

Ground / bond container and receiving equipment.

Use explosion-proof electrical, ventilating, lighting & equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

5.3 Advice for fire-fighters

Large quantities of gel hand sanitizer are flammable and vapors form explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidants.

Handle as a flammable liquid. Dilution of burning liquid with water will effect extinguishment.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment & emergency procedures

Put on appropriate personal protective equipment (see Section 8).

6.2 Environmental Precautions

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Collect in flammable waste container for disposal.

6.3 Methods and Materials for Containment and Cleaning Up

Eliminate all sources of ignition, small spills should be flushed with large quantities of water, larger spills should be collected for disposal.

6.4 Reference to other sections

For disposal, see Section 13.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

Normal measures for preventive fire protection

For precautions see Section 2.2.

7.2 Conditions for Safe Storage, including any incompatibilities

Store at normal room temperature away from reach of small children. Keep containers sealed.

7.3 Specific end-use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

Section 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Exposure Control Data:

Ingredient	Chemical Designations	Source	Value
Ethanol	CAS Number: 0000064-17-5	OSHA	TWA 1000 ppm (10-- mg/m3)
		ACGIH	STEL: 1000 ppm (Revised 2009)
		NIOSH	TWA 1000 ppm (10-- mg/m3)
		Supplier	No Established Limit
Isopropyl Alchohol	CAS Number: 0000067-63-0	OSHA	TWA 400 ppm (980 mg/m3; STEL 500 ppm
		ACGIH	TWA: 200 ppm; STEL: 400 ppm (revised 2003)
		NIOSH	TWA 400 ppm (980 mg/m3; STEL 500 ppm (1225 mg/m3)
		Supplier	No Established Limit

Carcinogen Data:

Ingredient	Chemical Designations	Source	Value
Ethanol	CAS Number: 0000064-17-5	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No.
Isopropyl Alcohol	CAS Number: 0000067-63-0	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No.

8.2 Exposure Controls

Appropriate Engineering Controls:

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

8.3 Personal Protective Equipment

Eye/Face Protection: Safety goggles.

Skin & Body Protection: Wear overalls to keep skin contact to a minimum. Use neoprene or rubber gloves or PVC.

Respiratory Protection: If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Other work practices: Eye bath and safety showers. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using the toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Control of Environmental Exposure: Normal usage may enter drains. Large quantities should be handled by licensed disposal company.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical & chemical properties:

Appearance	Form: Clear Colorless Gel
Odor	Citrus
Odor Threshold	no data available
pH	7.8-8.6
Melting Point	n/a
Freezing Point	n/a

Boiling Point	180 F (82 C)
Flash Point	86 F (30 C)
Evaporation Rate	no data available
Flammability	flammable
Explosion Limits	not measured
Vapor Pressure	no data available
Vapor Density	no data available
Specific Gravity	0.860-0.889
Water Solubility	soluble
Partition Coefficient	no data available
Auto-ignition Temperature	n/a
Decomposition Temp.	n/a
Viscosity	no data available
% Ethyl Alcohol (w/w)	55.8-68.2%

9.1 Other Safety Information

No other relevant information

Section 10: Stability & Reactivity

10.1 Reactivity: Hazardous Polymerization will not occur.

10.2 Chemical Stability: Stable under normal circumstances.

10.3 Possibility of Hazardous Reactions: No data available.

10.4 Conditions to Avoid: High temperatures and fires.

10.5 Incompatible Materials: Incompatible with strong oxidizing agents.

10.6 Hazardous Decomposition Products: High temperatures and fires may produce such toxic substances as carbon monoxide and carbon dioxide.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects:

Acute toxicity:

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed throught the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Ingredient (CAS Number)	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LD50 mg/L/4hr	Inhalation Dust/Mist LD50 mg/L/4hr	Inhalation Gas LD50 ppm
Ethanol (64-17-5)	7,060.00, Rat Category: NA	20,000.00 rabbit Category: NA	124.70 Rat Category: NA	No data available	No data available
Isopropyl Alcohol (67-63-0)	4,710.00 Rat Category: 5	12,800.00 Rat Category: NA	72.60 Rat Category: NA	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE.

Classification	Category	Hazard Description
Acute toxicity (oral)	none	Not applicable
Acute toxicity (dermal)	none	Not applicable
Acute toxicity (inhalation)	none	Not applicable
Skin corrosion/irritation	none	Not applicable
Serious eye damage/irritation	none	Not applicable
Respiratory sensitization	none	Not applicable
Skin sensitization	none	Not applicable

Germ cell mutagenicity	none	Not applicable
Carcinogenicity	none	Not applicable
Reproductive toxicity	none	Not applicable
STOT (single exposure)	none	Not applicable
STOT (repeated exposure)	none	Not applicable
Aspiration hazard	none	Not applicable

Section 12: Ecological Information

12.1 Toxicity: Toxic to aquatic life.

Aquatic Exotoxicity

Ingredient (CAS Number)	96 hr LC50 fish mg/l	48 hr EC50 crustacea mg/l	ErC50 algae mg/l
Ethanol (64-17-5)	42.00 Oncorhynchus mykiss	2.00 Daphnia magna	17.921 (96 hr) Ulva pertusa
Isopropyl Alcohol (67-63-0)	1,400.00 Lepomis macrochirus	100.00 Daphnia magna	100.00 (72 hr) Scenedesmus subspicatus

12.2 Persistance & Degradability: No data available on the preparation itself.

12.3 Bioaccumulative Potential: Not measured.

12.4 Mobility in Soil: No data available.

12.5 Results of PBT and vPvB Assessment: This product contains no PBT/vPvB chemicals.

12.6 Other adverse effects: No data available.

Section 13: Disposal Considerations

13.1 Waste Treatment Methods:

Destroy by liquid incineration. Use absorbent material and deposit in toxic landfill in accordance with local, state, and federal regulations.

Section 14: Transport Information

See bill of lading.

Section 15: Regulatory Information

TSCA: All components of this material are either listed or exempt from listing on the TSCA Inventory.

WHMIS Classification: B2

US EPA Tier II Hazards
- Fire: Yes
- Sudden Release of Pressure: No
- Reactive: No
- Immediate (Acute): No
- Delayed (Chronic): No

EPCRA 311/312 Chemicals and Requirements: No chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous: No chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals: Isoprophyl Alcohol.

New Jersey Right to Know Substances (>1%):
- Ethanol
- Isopropyl Alcohol

Pennsylvania Right to Know Substances (>1%):
- Ethanol
- Isopropyl Alcohol

California Prop 65 Components: This product does not contain any chemicals at levels which require reporting under this statute.

Section 16: Other Information

HMIS Ratings:

Health	2
Flammability	3
Physical Hazard	0

NFPA Ratings:

Flammability	3
Health	2

Instability/Reactivity 0

Addendum: Abbreviations & Acronyms

n/a: No applicable information found ar available.
ACGIH: American Conference of Governmental Industrial Hygienists
ATE: Acute Toxicity Estimate
CAS #: Chemical Abstracts Service Number
CDC: Centers for Disease Control
CFR: Code of Federal Regulations
DOT: Department of Transportation
EPA: Environmental Protection Agency
EPCRA: Emergency Planning and Community Right-to-Know Act
FDA: Food & Drug Administration
GHS: Globally Harmonized System
HCS: Hazard Communications Standard
HMIS: Hazardous Materials Identification System
HNOC: Hazards Not Otherwise Classified
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods
MSDS: Manufacturer's Safety Data Sheet (obsolete)
NIOSH: CDC National Institute for Occupational Safety and Health
NFPA: National Fire Protection Association
NTP: National Toxicity Program
OSHA: Occupational Safety and Health Administration
PBT: Persistant Bioaccumulative and/or Toxic Chemicals
PEL: Permissible Exposure Limit
PPE: Personal Protection Equipment
RCRA: Resource Conservation & Recovery Act
REACH: Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (EU)
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short-Term Exposure Limit
STOT: Specific Target Organ Toxicity
TAMC: Total Aerobic Microbial Count
TLCP: Toxic Characteristic Leaching Procedure
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act
TYMC: Total Combined Yeast & Mold Count
TWA: Time-Weighted Average
vPvB: (very) Accumulative, (very) Bioaccumulative and/or Toxic Chemicals
WHMIS: Workplace Hazardous Materials Identification System (Canada)