

General / Engineering Controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles

Skin Protection: Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Additional Information: Observe good chemical hygiene practices. Do not smoke or eat while using this product. Wash hands or exposed skin after using the product.

(add or delete rows as necessary)

Substances with Exposure Limits	CAS#	ACGIH-TLV	OSHA-PEL
Isopropyl alcohol	67-63-0	STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours.	TWA: 980 mg/m ³ 8 hours. TWA: 400 ppm 8 hours
Adipic acid	124-04-9	TWA: 5 mg/m ³ 8 hours.	

Section 9: Physical and Chemical Properties

State: Liquid	Melting Point: Not avail	Freezing Point: Not avail
Color: Clear. Colorless	Boiling Point/Range: 80°C (176°F)	pH: Not applicable
Sp Grav:	Odor: Alcohol-like.	Water Solubility: Partly soluble
Evaporation rate: Not avail	Flash Point: Closed cup: 11.6°C (52.9°F) [Tagliabue.]	Part. Coeff (n-octanol/water): Not avail

Upper Flam Limits: 12% Lower Flam Limits: 2% Vapor Pressure: Not avail
 VOC Content (lbs/gal): Viscosity: Not avail Autoignition Temp: Not avail

Section 10: Stability and Reactivity

General: The product is stable.
Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Incompatible materials: Reactive or incompatible with the following materials: oxidizing materials

Decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Section 11: Toxicological Information

General Information: Isopropyl alcohol IARC classification: 3

Toxicological Information (product): Eye contact : Adverse symptoms may include the following: pain or irritation, watering, redness

Inhalation: Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

Skin contact: Adverse symptoms may include the following: irritation, redness.

Ingestion: Adverse symptoms may include the following: nausea or vomiting, stomach pains.

Likely Routes of Exposure: Not available

Skin contact: May cause skin irritation

Ingestion: Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Toxicological Information (contained substances)

Hazardous substance (name)	LD50 Oral	LD50 Dermal	LC50 Inh	Irritancy:
Isopropyl alcohol	5000 mg/kg (rat)	12800 mg/kg (rabbit)		24 hours 100 milligrams 10 milligrams 100 milligrams 500 milligrams
Adipic acid	5050 mg/kg (rat)	>7940 mg/kg (rabbit)		10 milligrams 24 hours 20 milligrams 0.25 Grams

Carcinogenicity or mutagenicity: No known significant effects or critical hazards.

Developmental effects/fertility effects: No known significant effects or critical hazards.

Name: Isopropyl alcohol
 Category: 3
Specific target organ toxicity (single exposure): Route of exposure: Not applicable
 Target organs: Narcotic effects
Potential acute health effects: Eye contact : Causes serious eye irritation.
 Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness and dizziness.
 Skin Contact: May cause skin irritation.
 Ingestion: Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.
 Route: Oral ATE Value: 5153.8 mg/kg

Delayed and immediate effects and also chronic effects from short and long term exposure) Short term exposure
 Potential immediate effects: Not available.
 Potential delayed effects : Not available
 Long term exposure
 Potential immediate effects: Not available.
 Potential delayed effects : Not available.
 Potential chronic health effects
 Not available.

Section 12: Ecological Information

Toxicity:	Product/ingredient name	Result	Species	Exposure
	Isopropyl alcohol	Acute LC50 1400000 to 1950000 µg/l Marine water Acute LC50 1400000 µg/l	Crustaceans - Crangon crangon	48 hours
			Fish - Gambusia affinis	96 hours
	Adipic acid	Acute LC50 97000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours

Degradation / Mobility info: Not Avail

Bioaccumulative potential:	Product/Ingredient name	logP	BCF	Potential
	Isopropyl alcohol	0.05	-	low
	Adipic acid	0.093	3.162	low

Other adverse effects: No known significant effects or critical hazards.

Section 13: Disposal Information

Product disposal: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way.

Container disposal: Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Other considerations: No further information.

Section 14: Transport Information

DOT: Consumer commodity ORM-D

IMO/IMDG: UN1263, Paint, Hazard class 3, Packing group II

IATA: ID800, Consumer Commodity ID800, Hazard class 9

TDG: Consumer commodity ORM-D

Comments: Special provisions 640 (c)
Tunnel code (D/E)

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15: Regulatory Information

TSCA: 8(a) CDR Exempt/Partial exemption: Not determined. All components are listed or exempted.

Clean Air Act Section 112 Not listed

(b) Hazardous Air Pollutants (HAPs)

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Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304: No products were found.

SARA 304 RQ Not applicable.

SARA 311/312 Fire hazard

classification Immediate (acute) health hazard

Composition/information on ingredients:

Name	%	Fire Hazard	Sudden Release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Isopropyl alcohol	95 - 100	Yes.	No.	No.	Yes.	No.
Adipic acid	1 - 5	No.	No.	No.	Yes.	No.

SARA 313

	Product Name	CAS number	%
Form R - Reporting requirements	Isopropyl alcohol	67-63-0	95 - 100
Supplier notification	Isopropyl alcohol	67-63-0	95 - 100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

California Prop 65 Substances: PROPOSITION 65 WARNING: American Beauty tools & accessories are lead-free & RoHS Compliant. However, use of this product with lead-bearing solders (or any other chemicals found on the current Proposition 65 List) could expose the user to chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

State regulations:

Massachusetts : The following components are listed: ISOPROPYL ALCOHOL; ADIPIC ACID

New York : The following components are listed: Adipic acid

New Jersey : The following components are listed: ISOPROPYL ALCOHOL; 2-PROPANOL; ADIPIC ACID; HEXANEDIOIC ACID

Pennsylvania : The following components are listed: 2-PROPANOL; HEXANEDIOIC ACID

International Regulations:

Chemical Weapon

Convention List

Schedules I, II & III Chemicals Not listed.

Montreal Protocol (Annexes A, B, C, E) Not listed.

Stockholm Convention on Persistent Organic Pollutants Not listed.

Rotterdam Convention on Prior Inform Consent (PIC) Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

