

SAFETY DATA SHEET

1. Identification

Product identifier: - ISOPROPYL ALCOHOL SOLUTION

Other means of identification

Synonyms:

IPA, 2-Propanol, Propanol, Isopropanol

SDS number:

000100000034

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard classification

Physical hazards

Flammable liquids

Category 2

Health hazards

Serious eye damage/eye irritation

Category 2B

Label elements

Hazard symbol



ORDER NO:SJ299982

MATERIAL SAFETY DATA SHEET CUST:GOLDEN PACIFIC *

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Signal word

Danger

Hazard statement

Highly flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

May be harmful if swallowed and enters airways.

Precautionary statement

Prevention

Use personal protective equipment as required. Keep container tightly closed. Ground/bond container and receiving equipment. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Obtain special instructions before use.

Response

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 advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. In case of fire: Use ... to extinguish.

Storage

Store in a closed container. Keep container tightly closed. Store in well-ventilated place. Store in a dry place. Store locked up.

Disposal

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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Other hazards which do not result in GHS classification

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
Isopropyl Alcohol		67-63-0	>=10 - <=99%
Water		7732-18-5	>=1 - <=90%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion:

Call a physician or poison control center immediately. Only induce

vomiting at the instruction of medical personnel. Never give anything by

mouth to an unconscious person.

Inhalation:

Move to fresh air. If breathing is difficult, give oxygen. Perform artificial

respiration if breathing has stopped. Get medical attention immediately.

Skin contact:

Immediately flush with plenty of water for at least 15 minutes while

removing contaminated clothing and shoes.

Eye contact:

If in eyes, hold eyes open, flood with water for at least 15 minutes and see

a doctor.

Most important symptoms/effects, acute and delayed

Symptoms:

No data available.

Indication of immediate medical attention and special treatment needed

Treatment:

No data available.

5. Fire-fighting measures

General fire hazards:

No data available.

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Suitable (and unsuitable) extinguishing media

Suitable extinguishing

Use: Carbon dioxide or dry powder. Water in large amounts. Alcohol

media:

resistant foam.

Unsuitable extinguishing

No data available.

media:

Specific hazards arising from the

Heat may cause the containers to explode.

chemical:

Special protective equipment and precautions for firefighters

Special fire fighting

No data available.

procedures:

Special protective equipment for Use water spray to keep fire-exposed containers cool.

fire-fighters:

6. Accidental release measures

Personal precautions, protective equipment and emergency

Use personal protective equipment. Keep unauthorized personnel away.

procedures:

Methods and material for

containment and cleaning up:

All equipment used when handling the product must be grounded.

Eliminate sources of ignition. Absorb spillage with non-combustible,

absorbent material. Dike for later disposal.

7. Handling and storage

Precautions for safe handling:

Flammable/combustible - Keep away from oxidizers, heat and flames.

Avoid contact with skin and eyes. Avoid breathing mists or vapors. Use

only with adequate ventilation.

Conditions for safe storage,

including any incompatibilities: No data available.

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8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Chemical identity	Туре	Exposure Lir	mit values	Source
Isopropyl Alcohol	TWA	200 ppm		US. ACGIH Threshold Limit Values (03 2013)
	STEL	400 ppm		US. ACGIH Threshold Limit Values (03 2013)
	REL	400 ppm	980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	STEL	500 ppm	1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	400 ppm	980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	STEL	500 ppm	1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	400 ppm	980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm	1,225 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA	400 ppm	980 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		4,920 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmenta Quality) (02 2013)
	AN ESL		492 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmenta Quality) (02 2013)
,	ST ESL		2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmenta Quality) (02 2013)
2	AN ESL		200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmenta Quality) (02 2013)
	TWA PEL	400 ppm	980 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne

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			Contaminants (02 2012)
STEL	500 ppm	1,225	US. California Code of Regulations,
		mg/m3	Title 8, Section 5155. Airborne
			Contaminants (02 2012)

Biological limit values

Chemical identity	Exposure Limit values	Source
Isopropyl Alcohol	40 mg/l (Urine)	ACGIH BEL (03 2013)
(acetone: Sampling		
time: End of shift at		-
end of work week.)		

Appropriate engineering

No data available.

controls

Individual protection measures, such as personal protective equipment

General information:

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

Eye/face protection:

No data available.

Skin protection

Hand protection:

No data available.

Other:

No data available.

Respiratory protection:

No data available.

Hygiene measures:

No data available.

9. Physical and chemical properties

Physical state:

Liquid

Form:

No data available.

Color:

Odor:

pH:

Clear water-white

Odor of alcohol

Odor threshold:

No data available.

Melting point/freezing point:

No data available.

Merting point/ neezing point.

No data available.

Initial boiling point and boiling range:

80 - 100 °C

Flash Point:

13 °C

Evaporation rate:

No data available.

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Flammability (solid, gas):

No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

No data available.

Flammability limit - lower (%):

No data available.

Explosive limit - upper (%):

No data available.

Explosive limit - lower (%):

No data available.

Vapor pressure:

No data available.

Vapor density:

No data available.

Relative density:

No data available.

Solubility(ies)

Solubility in water:

No data available.

Solubility (other):

No data available.

Partition coefficient (n-octanol/water):

No data available.

Auto-ignition temperature:

No data available.

No data available.

Decomposition temperature:

Viscosity:

No data available.

10. Stability and reactivity

Reactivity:

No data available.

Chemical stability:

Material is stable under normal conditions.

Possibility of hazardous

No data available.

reactions:

Conditions to avoid:

Flammable/combustible - Keep away from oxidizers, heat and flames. Strong oxidizing agents. Aldehydes. Amines. Caustics. Alkanolamines.

Incompatible materials: Hazardous decomposition

No data available.

products:

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:

No data available.

Inhalation:

No data available.

Skin contact:

No data available.

Eye contact:

No data available.

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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:

ATEmix (): 3,636.363636 mg/kg

Dermal

Product:

Not classified for acute toxicity based on available data.

Inhalation

Product:

No data available.

Repeated dose toxicity

Product:

No data available.

Skin corrosion/irritation

Product:

No data available.

Serious eye damage/eye irritation

Product:

No data available.

Respiratory or skin sensitization

Product:

No data available.

Carcinogenicity

Product:

No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

Product:

No data available.

In vivo

Product:

No data available.

Reproductive toxicity

Product:

No data available.

Specific target organ toxicity - single exposure

Product:

No data available.

Specific target organ toxicity - repeated exposure

Product:

No data available.

Aspiration hazard

Product:

No data available.

Other effects:

No data available.

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12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:

No data available.

Specified substance(s):

Isopropyl Alcohol

LC 50 (Fathead minnow (Pimephales promelas), 1 h): 11,830 mg/l Mortality

LC 50 (Fathead minnow (Pimephales promelas), 24 h): 10,600 mg/l Mortality LC 50 (Fathead minnow (Pimephales promelas), 24 h): 11,160 mg/l Mortality LC 50 (Harlequinfish, red rasbora (Rasbora heteromorpha), 24 h): 7,100 mg/l Mortality LC 50 (Bluegill (Lepomis macrochirus), 24 h): >

1,400 mg/l Mortality

Aquatic invertebrates

Product:

No data available.

Specified substance(s):

Isopropyl Alcohol

LC 50 (Water flea (Daphnia magna), 24 h): > 10,000 mg/l Mortality LC 50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 900 - 1,950 mg/l Mortality LC 50 (Common shrimp, sand shrimp (Crangon crangon), 96 h): 750 - 1,650 mg/l Mortality LC 50 (Brine shrimp (Artemia salina), 24 h): >

10,000 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product:

No data available.

Aquatic invertebrates

Product:

No data available.

Toxicity to Aquatic Plants

Product:

No data available.

Persistence and degradability

Biodegradation

Product:

No data available.

BOD/COD ratio

Product:

No data available.

Bioaccumulative potential

Bioconcentration factor (BCF)

Product:

No data available.

Partition coefficient n-octanol / water (log Kow)

No data available.

Specified substance(s):

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Product:

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Isopropyl Alcohol

Log Kow: 0.05

Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

Propan-2-ol

No data available.

Water

No data available.

Known or predicted distribution to environmental compartments

Propan-2-ol

No data available.

Known or predicted distribution to environmental compartments

Water

No data available.

13. Disposal considerations

Disposal instructions:

No data available.

Contaminated packaging:

No data available.

14. Transport information

DOT

UN number:

UN 1219

UN proper shipping name:

Isopropanol Solution

Transport hazard class(es)

Class:

3

Label(s):

3

Packing group:

11

Marine Pollutant:

11

Marine Politicant.

Not regulated.

Special precautions for user:

_

IMDG

UN number:

UN 1219

UN proper shipping name:

ISOPROPANOL

Transport hazard class(es)

Class:

3

Label(s): EmS No.:

3 F-E, S-D

Packing group:

- 11

Marine Pollutant:

Not regulated.

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Special precautions for user:	_		
ATA	UN 1210		
UN number:	UN 1219		
Proper Shipping Name:	Isopropanol Solutio	on	
Transport hazard class(es):	2		
Class:	3		
Label(s):	3		
Packing group:	11		
Environmental hazards	Not regulated.		
Special precautions for user:	=		
Other information			
Passenger and cargo aircra	ft: Allowed.		
Cargo aircraft only:	Allowed.		
. Regulatory information			
Superfund amendments and reau	Reportable quantity: 100 l		
Isopropyl Alcohol Superfund amendments and reauth Hazard categories Acute (Immediate) Chro SARA 302 Extremely hazardou None present or none SARA 304 Emergency release to Chemical identity Isopropyl Alcohol	Reportable quantity: 100 line horization act of 1986 (SA nic (Delayed) Fire substance present in regulated quant otification RQ 100 lbs.	Reactive Pressure Generating	
Isopropyl Alcohol Superfund amendments and reauthazard categories Acute (Immediate) Chro SARA 302 Extremely hazardou None present or none SARA 304 Emergency release is Chemical identity Isopropyl Alcohol SARA 311/312 Hazardous chemical	Reportable quantity: 100 li horization act of 1986 (SA nic (Delayed) Fire s substance present in regulated quant otification RQ 100 lbs. nical	Reactive Pressure Generating tities.	
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Isopropyl Alcohol Superfund amendments and reauthazard categories Acute (Immediate) Chro SARA 302 Extremely hazardou None present or none SARA 304 Emergency release to Chemical identity Isopropyl Alcohol SARA 311/312 Hazardous chemical identity Chemical identity Isopropyl Alcohol Water	Reportable quantity: 100 line horization act of 1986 (SA nic (Delayed) Fire substance present in regulated quant otification RQ 100 lbs. Threshold Planning Quant	Reactive Pressure Generating tities.	
Isopropyl Alcohol Superfund amendments and reauthazard categories Acute (Immediate) Chro SARA 302 Extremely hazardou None present or none SARA 304 Emergency release is Chemical identity Isopropyl Alcohol SARA 311/312 Hazardous chemical identity Chemical identity Isopropyl Alcohol Water SARA 313 (TRI reporting)	Reportable quantity: 100 line horization act of 1986 (SA nic (Delayed) Fire substance present in regulated quant otification RQ 100 lbs. Threshold Planning Quant threshold Planning Quant	Reactive Pressure Generating tities.	
Isopropyl Alcohol Superfund amendments and reauthazard categories Acute (Immediate) Chro SARA 302 Extremely hazardou None present or none SARA 304 Emergency release is Chemical identity Isopropyl Alcohol SARA 311/312 Hazardous chemical identity Chemical identity Isopropyl Alcohol Water SARA 313 (TRI reporting)	Reportable quantity: 100 line horization act of 1986 (SA nic (Delayed) Fire substance present in regulated quant otification RQ 100 lbs. Threshold Planning Quant Threshold Planning Quant Reporting	Reactive Pressure Generating tities. tity 500 lbs 500 lbs	
Isopropyl Alcohol Superfund amendments and reau Hazard categories Acute (Immediate) Chro SARA 302 Extremely hazardou None present or none SARA 304 Emergency release of Chemical identity Isopropyl Alcohol SARA 311/312 Hazardous chero Chemical identity Chemical identity Isopropyl Alcohol Water SARA 313 (TRI reporting)	Reportable quantity: 100 line horization act of 1986 (SA nic (Delayed) Fire substance present in regulated quant otification RQ 100 lbs. Threshold Planning Quant Threshold Planning Quant Reporting hreshold for Reporting	Reactive Pressure Generating tities. Lity Soo lbs 500 lbs ting threshold for	
Isopropyl Alcohol Superfund amendments and reauthazard categories Acute (Immediate) Chro SARA 302 Extremely hazardous None present or none SARA 304 Emergency release is Chemical identity Isopropyl Alcohol SARA 311/312 Hazardous chemical identity Chemical identity Isopropyl Alcohol Water SARA 313 (TRI reporting) Chemical identity	Reportable quantity: 100 line horization act of 1986 (SA nic (Delayed) Fire substance present in regulated quantity of the first following threshold Planning Quantity for the shold for Report the first for manufacturers manufacturers manufacturers for the state of	Reactive Pressure Generating tities. tity tity 500 lbs 500 lbs ting threshold for facturing and processing	
Isopropyl Alcohol Superfund amendments and reau Hazard categories Acute (Immediate) Chro SARA 302 Extremely hazardou None present or none SARA 304 Emergency release of Chemical identity Isopropyl Alcohol SARA 311/312 Hazardous chero Chemical identity Chemical identity Isopropyl Alcohol Water SARA 313 (TRI reporting)	Reportable quantity: 100 line horization act of 1986 (SA nic (Delayed) Fire substance present in regulated quantity of the shold Planning Quantification RQ 100 lbs. Threshold Planning Quant Threshold Planning Quantification Reporting hreshold for Report the steep substance Report Report 10000 lbs	Reactive Pressure Generating tities. tity tity 500 lbs 500 lbs ting threshold for facturing and processing 25000 lbs.	

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Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Isopropyl Alcohol

Listed

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

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Inventory Status: Australia AICS:

Canada DSL Inventory List:

EU EINECS List: EU ELINCS List:

Japan (ENCS) List:

EU No Longer Polymers List:

China Inv. Existing Chemical Substances:

Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory:

Philippines PICCS: US TSCA Inventory:

New Zealand Inventory of Chemicals:

Japan ISHL Listing:

Japan Pharmacopoeia Listing:

Not in compliance with the inventory.

Not in compliance with the inventory.

On or in compliance with the inventory

Not in compliance with the inventory.

Not in compliance with the inventory. Not in compliance with the inventory.

On or in compliance with the inventory

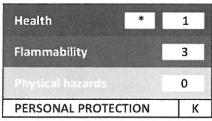
Not in compliance with the inventory.

Not in compliance with the inventory.

Not in compliance with the inventory.

16.Other information, including date of preparation or last revision

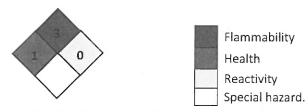
HMIS Hazard ID



K - Hood, Gloves, Protective Suit & Boots

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health

NEPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date:

07/15/2015

1.8

Revision date:

No data available.

Version #: Further information:

No data available.