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# **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

**Product name** : Isopropanol 99% **Product Use Descrip-** : Alcohol solvent

tion

Manufacturer or supplier's details

Company : SimChem Corporation
Address 311 Sarasota Center Blvd.
Sarasota, Florida 34240

**Emergency telephone number:** 

Transport North America: CHEMTREC 800.424.9300

Additional Infor-

mation:

: E-Mail: simchem@verizon.net SDS Requests: 1-941-377-9929 SDS Requests Fax: 1-941-377-9539

Website: www.simchem.com

#### **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Flammable liquids : Category 2

Eye irritation : Category 2A

Specific target organ tox-

icity - single exposure

: Category 3 (Central nervous system)

**GHS Label element** 

Hazard pictograms





Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements : **Prevention:** 

P210 Keep away from heat/sparks/open flames/hot

surfaces. - No smoking.

P233 Keep container tightly closed.



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P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/

lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection.

#### Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

#### Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

#### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

## **Potential Health Effects**

**Carcinogenicity:** 

**IARC** No component of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

**ACGIH** No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by ACGIH.

**OSHA**No component of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by OSHA.



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NTP No component of this product present at levels greater

than or equal to 0.1% is identified as a known or antici-

pated carcinogen by NTP.

# **Emergency Overview**

Appearance	liquid
Colour	Clear, Colorless
Odour	alcohol-like
Hazard Summary	No information available.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Substance

# **Hazardous components**

CAS-No.	Chemical Name	Concentration (%)
67-63-0	Isopropyl alcohol	90 - 100

Molecular formula : (CH3)2 CHOH

**Synonyms** : Isopropanol Anhydrous/Isopropyl Alcohol ACS

Grade/Isopropyl Alcohol/TT I 735 Grade A/Velvasol 425/Value Grade Isopropanol, TT I 735A Grade B

#### **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attend-

ance.

Do not leave the victim unattended.

If inhaled : Consult a physician after significant exposure.

If unconscious place in recovery position and seek

medical advice.

In case of skin contact : If on skin, rinse well with water.

If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.



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If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious per-

son.

If symptoms persist, call a physician.

### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing

media

: Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

: High volume water jet

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains

or water courses.

Hazardous combustion

products

: Carbon oxides

Specific extinguishing

methods

: Use a water spray to cool fully closed containers.

Further information : Collect contaminated fire extinguishing water sepa-

rately. This must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regu-

lations.

For safety reasons in case of fire, cans should be

stored separately in closed containments.

Special protective equip-

ment for firefighters

: Wear self-contained breathing apparatus for fire-

fighting if necessary.

Use personal protective equipment.

### NFPA Flammable and Combustible Liquids Classification:

Flammable Liquid Class IB

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.

Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.



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Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precau-

tions

: Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains

inform respective authorities.

Methods and materials for containment and cleaning up

: Contain spillage, and then collect with noncombustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regula-

tions (see section 13).

#### **SECTION 7. HANDLING AND STORAGE**

Advice on safe handling : Avoice

: Avoid formation of aerosol.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before

use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in

the application area.

Take precautionary measures against static discharg-

es.

Provide sufficient air exchange and/or exhaust in work

rooms.

Open drum carefully as content may be under pres-

sure.

Dispose of rinse water in accordance with local and

national regulations.

Conditions for safe storage

: No smoking.

Keep container tightly closed in a dry and well-

ventilated place.

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Observe label precautions.

Electrical installations / working materials must com-

ply with the technological safety standards.

#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

# **Components with workplace control parameters**

CAS-No.	Components	Value type	Control parame-	Basis



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		(Form of exposure)	ters / Permissi- ble concentra- tion	
67-63-0	Isopropyl alcohol	TWA	200 ppm	ACGIH
		STEL	400 ppm	ACGIH
		TWA	400 ppm 980 mg/m3	NIOSH REL
		ST	500 ppm 1,225 mg/m3	NIOSH REL
		TWA	400 ppm 980 mg/m3	OSHA Z-1
		TWA	400 ppm 980 mg/m3	OSHA PO
		STEL	500 ppm 1,225 mg/m3	OSHA P0

# **Biological occupational exposure limits**

Components	CAS-No.	Control	Biological	Sam-	Permissi-	Basis
		parame-	specimen	pling	ble con-	
		ters		time	centration	
Isopropyl alcohol	67-63-0	Acetone	In urine	End of shift at end of work- week	40 mg/l	ACGIH BEI

# Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

In the case of vapour formation use a respirator with

an approved filter.

Hand protection

Remarks : The suitability for a specific workplace should be dis-

cussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Wear face-shield and protective suit for abnormal pro-

cessing problems.

Skin and body protection : impervious clothing

Choose body protection according to the amount and concentration of the dangerous substance at the work

place.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.



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### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Colour : Clear, Colorless

Odour : alcohol-like

Odour Threshold : No data available

: 7 @ 20 - 25 °C (68 - 77 °F) pΗ

Freezing Point (Melting point/freezing point)

: -92 - -89 °C (-134 - -128 °F)

Boiling Point (Boiling point/boiling range)

: 82 - 82.3 °C (180 - 180.1 °F)

Flash point : 12 - 13 °C (54 - 55 °F)

Evaporation rate : 2

(Butyl Acetate = 1)

Flammability (solid, gas) : No data available

Burning rate : No data available

Upper explosion limit : 12 - 19 %(V)

Lower explosion limit : 2.0 - 3.3 %(V)

Vapour pressure : 33 - 45.4 mmHg @ 20 °C (68 °F)

: 2.1 @ 15 - 20 °C (59 - 68 °F) Relative vapour density

(Air = 1.0)

: 0.7855 - 0.79 @ 20 °C (68 °F) Relative density

Reference substance: (water = 1)

: 0.79 g/cm3 @ 20 °C (68 °F) Density

Bulk density : No data available

Solubility(ies)

Water solubility : completely miscible



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Solubility in other sol- : No data available



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vents

Partition coefficient: n-

octanol/water

: log Pow: 0.05 @ 25 °C (77 °F)

Auto-ignition temperature : 363 - 425 °C

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : 2.4 - 2.43 mPa.s @ 20 °C (68 °F)

Viscosity, kinematic : 2.6 mm2/s @ 25 °C (77 °F)

#### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No dangerous reaction known under conditions of

normal use.

Chemical stability : Stable under normal conditions.

Possibility of hazardous

reactions

: No hazards to be specially mentioned.

Conditions to avoid : Keep away from heat, flame, sparks and other ignition

sources.

Incompatible materials : acetaldehyde

Aldehydes aluminum Alkali metals Amines Chlorine Ethylene oxide halogens

Iron

isocyanates Strong acids

Strong oxidizing agents

Hazardous decomposition

products

: Carbon monoxide, carbon dioxide and unburned hy-

drocarbons (smoke).



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#### **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Acute toxicity**

#### **Components:**

67-63-0:

Acute oral toxicity : LD50 (Rat): 5,045 mg/kg

Acute inhalation toxicity : LC50 (Rat): 16000 ppm

Acute dermal toxicity : LD50 (Rabbit): 12,800 mg/kg

#### Skin corrosion/irritation

#### **Product:**

Result: Irritating to skin.

#### **Components:**

67-63-0:

Species: Rabbit

Result: Mild skin irritation

# Serious eye damage/eye irritation

#### **Product:**

Result: Irritating to eyes.

#### **Components:**

67-63-0:

Species: Rabbit

Result: Irritating to eyes.

# Respiratory or skin sensitisation

# Germ cell mutagenicity

#### **Components:**

67-63-0:

Genotoxicity in vitro : Test Type: Ames test

Test species: Salmonella typhimurium

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Test species: Mouse

Method: OECD Test Guideline 474



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Result: negative

Germ cell mutagenicity-

Assessment

: Did not show mutagenic effects in animal experi-

ments.

# Carcinogenicity

# **Components:**

67-63-0: Species: Rat NOAEL: 5,000

ppm

Method: OECD Test Guideline 451

sessment

Carcinogenicity - As- : Not classifiable as a human carcinogen.

# Reproductive toxicity

# **Components:**

67-63-0:

Reproductive toxicity -

Assessment

: Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experi-

ments.

# STOT - single exposure

Product: No data available

# **Components:**

67-63-0:

<b>Exposure routes:</b>	Target Organs:	Assessment:	Remarks:
Inhalation	Central nervous system	May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.	

# STOT - repeated exposure

**Product:** No data available

### **Components:**

67-63-0: No data available



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# **Aspiration toxicity**

# **Product:**

No aspiration toxicity classification

#### **Further information**

#### **Product:**

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

#### Components:

67-63-0:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): >

1,000 mg/l

Exposure time: 96 h

Toxicity to daphnia and

other aquatic inverte-

brates

: LC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae : Remarks: No data available

#### Persistence and degradability

### **Product:**

Biodegradability : Remarks: Readily biodegradable

# **Bioaccumulative potential**

No data available

# Mobility in soil

No data available

# Other adverse effects

No data available

## **Product:**

40 CFR Protection of Environment; Part 82 Protection Regulation

of Stratospheric Ozone - CAA Section 602 Class I Sub-

stances



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Remarks This product neither contains, nor was manufactured

with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A

+ B).

Additional ecological in-

formation

: No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Dispose of in accordance with all applicable local,

state and federal regulations.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.
Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty

drum.

# **SECTION 14. TRANSPORT INFORMATION**

**IATA (International Air Transport Association)**: UN1219, Isopropanol, 3, II, Flash Point:12 - 13 °C(54 - 55 °F)

IMDG (International Maritime Dangerous Goods): UN1219, ISOPROPANOL, 3, II

**DOT (Department of Transportation)**: UN1219, Isopropanol, 3, II

## **SECTION 15. REGULATORY INFORMATION**

**OSHA Hazards** : Flammable liquid, Moderate skin irritant, Moderate eye

irritant

**WHMIS Classification** : B2: Flammable liquid

D2B: Toxic Material Causing Other Toxic Effects

**EPCRA - Emergency Planning and Community Right-to-Know Act** 



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# **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 : Fire Hazard

**Hazards** Immediate (Acute) Health Hazard

**SARA 302** : No chemicals in this material are subject to the

reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical compo-

nents with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by

SARA Title III, Section 313.

#### **Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F). The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI

Intermediate or Final VOC's (40 CFR 60.489):

67-63-0 Isopropyl alcohol 100 %

# **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. Clean-Water Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

# **US State Regulations**

### **Massachusetts Right To Know**

67-63-0 Isopropyl alcohol 90 - 100 %

Pennsylvania Right To Know

67-63-0 Isopropyl alcohol 90 - 100 %

**New Jersey Right To Know** 

67-63-0 Isopropyl alcohol 90 - 100 %

California Prop 65 This product does not contain any chemicals known to

State of California to cause cancer, birth defects, or

any other reproductive harm.

The components of this product are reported in the following inventories:



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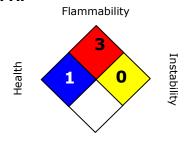
	1	
United States TSCA Inventory	:	y (positive listing) (On TSCA Invento- ry)
Canadian Domestic Substances List (DSL)	:	y (positive listing) (All components of this product are on the Canadian DSL.)
Australia Inventory of Chemical Substances (AICS)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
New Zealand. Inventory of Chemical Substances	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Japan. ENCS - Existing and New Chemical Substances Inventory	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Korea. Korean Existing Chemicals Inventory (KECI)	:	y (positive listing) (On the inventory, or in compliance with the inventory)
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	:	y (positive listing) (On the inventory, or in compliance with the inventory)
China. Inventory of Existing Chemical Substances in China (IECSC)	:	y (positive listing) (On the inventory, or in compliance with the inventory)



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#### SECTION 16. OTHER INFORMATIONFurther information

#### NFPA:



Special hazard.

### **HMIS III:**

HEALTH	1
FLAMMABILITY	3
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High

4 =Extreme, \* = Chronic

The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances.

Key or legend to abbreviations and acronyms used in the safety data sheet					
ACGIH	American Conference of Gov-	LD50	Lethal Dose 50%		
	ernment Industrial Hygienists				
AICS	Australia, Inventory of Chem-	LOAEL	Lowest Observed Adverse Effect		
	ical Substances		Level		
DSL	Canada, Domestic Substanc-	NFPA	National Fire Protection Agency		



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	es List		
NDSL	Canada, Non-Domestic Sub-	NIOSH	National Institute for Occupational
	stances List		Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure	OSHA	Occupational Safety & Health Admin-
	Scenario Tool		istration
EOSCA	European Oilfield Specialty	PEL	Permissible Exposure Limit
	Chemicals Association		
EINECS	European Inventory of Exist-	PICCS	Philipines Inventory of Commercial
	ing Chemical Substances		Chemical Substances
MAK	Germany Maximum Concen-	PRNT	Presumed Not Toxic
	tration Values		
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reau-
			thorization Act.
IARC	International Agency for Re-	TLV	Threshold Limit Value
	search on Cancer		
IECSC	Inventory of Existing Chemi-	TWA	Time Weighted Average
	cal Substances in China		
ENCS	Japan, Inventory of Existing	TSCA	Toxic Substance Control Act
	and New Chemical Substanc-		
	es		
KECI	Korea, Existing Chemical In-	UVCB	Unknown or Variable Compositon,
	ventory		Complex Reaction Products, and
			Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials In-
			formation System
LC50 Lethal Concentration 50%			