ISOPROPYL ALCOHOL 99.9%





branu:

SECTION 1

IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Trade name Isopropyl Alcohol

Synonyms Dimethyl Carbinol, IPA, Isopropanol

Use Fuel Additive, Hard-Surface Cleaner, Industrial & Institutional

Cleaning, Industrial Use, Intermediate, Paint And Coatings, Personal Care, Pharmaceutical, Process Material, Process/Extraction Solvent, Raw Material For Chemical Processes, Raw Material For Cosmetic

Products, Raw Material For Industry, Solvent

Company Pacific Innovations LLC

Address 129 Seegers Ave

Elk Grove Village, IL 60007

Telephone (503) 455-8581

Emergency Contact (Infotrac) 1-800-535-5053

SECTION 2

HAZARDS IDENTIFICATION

OSHA/GHS Flammable Liquids Category 2

Hazards Eye irritation Category 2A

Specific target organ Category 3 (Narcotic effects) toxicity - single exposure

LABEL ELEMENTS

Hazard symbols





Signal word Danger

Hazard statements H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

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Prevention P210	Keep away from heal/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/lighting equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/ eye protection/ face protection.

P264 Wash skin thoroughly after handling.

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

P271 Use only outdoors or in a well-ventilated area.

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

P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry

chemical or carbon dioxide for extinction.

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.

P304 + P340 IF IN HALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

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

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

ComponentCAS-No.Weight percent2-Propanol67-63-0100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

SECTION 4 FIRST AID MEASURES

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.

Inhalation Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.

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Ingestion If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

SECTION 5

FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

Fire/explosion Vapours may form explosive mixture with air. Flash back possible

over considerable distance. Use water spray to disperse the vapors.

NFPA Class 1 B flammable liquid.

Suitable extinguishing Use water spray, alcohol-resistant foam, dry chemical or carbon

media dioxide.

Protective equipment In the event of fire, wear self-contained breathing apparatus.

and precautions for firefighters

Further information Keep containers and surroundings cool with water spray. Beware of

vapours accumulating to form explosive concentrations. Vapours can

accumulate in low areas.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and Evacuate personnel to safe areas. Remove all sources of ignition.

materials for Contain spillage, and then collect with non-combustible absorbent **containment and** material, (e.g. sand, earth, diatomaceous earth, vermiculite)

cleaning up and place in container for disposal according to local/ national regulations (see section 13). Do not flush into surface water or

sanitary sewer system.

HANDLING AND STORAGE SECTION 7

Safe handling advice Ensure all equipment is electrically grounded before beginning

transfer operations. Keep away from heat and sources of ignition.

Storage/Transport Ambient

pressure

Load/Unload Ambient

temperature

EXPOSURE CONTROLS/PERSONAL PROTECTION SECTION 8

ENGINEERING Air contaminant levels should be controlled below the PEL or TLV for this **MEASURES** product (see Exposure Guidelines). Ensure adequate ventilation, especially in confined areas. Use explosion-proof equipment.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Chemical resistant goggles must be worn., Face-shield.

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Skin Wear suitable protective clothing, gloves and eye/face protection.

Inhalation Inhalation Respiratory protection is normally not required except in

emergencies or when conditions cause excessive airborne levels of mists or

vapors. Use NIOSH approved respiratory protection.

EXPOSURE GUIDELINES

Components Exposure Limit(s)

2-Propanol 2-Propanol OSHA PEL (Permissible Exposure Limit) 400 ppm 980 mg/m3

ACGIHTLV (8-hour) 200 ppm

ACGIH STEL (Short Term Exposure Limit) 400 ppm

PEL= Permissible Exposure Limits TWA= Time Weighted Average (8 hr.)

TLV= Threshold Limit Value STEL= Short Term Exposure Limit (15 min.)

EL= Excursion Limit WEEL= Workplace Environmental Exposure Level

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Appearance liquid;

Colour clear

Form liquid

Odour alcohol-like

Odour Threshold No data available

Flash point 12°C, 53.6°F;

Flammability Upper explosion limit: 12 %(V)

Lower explosion limit: 2 %(V)

Boiling point/boiling 84.2°C, 180.3°F;

range

Melting point/range -88.5°C, -127.3°F;

Auto-ignition 398.9°C, 750°F;

temperature

Decomposition No data available

temperature

Flammability (solid, No data available

gas)

Vapour pressure 33 mm Hg @ 20 °C, 68 °F;

Vapour density No data available

Density 0.785 g/cm3 @ 20 °C, 68 °F;

Water solubility miscible

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Viscosity 0.1 mm2/s

Viscosity, dynamic 2.4 mPa.s

pH 7

Evaporation rate No data available

Partition coefficient: No data available

n-octanol/water

Volatile organic 100 %

compounds (VOC)

content

SECTION 10 | STABILITY AND REACTIVITY

Reactivity No decomposition if stored and applied as directed.

Chemical stability Stable under recommended storage conditions.

Conditions to avoid Heat, flames and sparks. Avoid temperatures above 35°C, direct

sunlight and contact with sources of heat.

Hazardous Combustion products include carbon dioxide, carbon monoxide and

decomposition possibly other unidentified organic compounds.

products

Materials to avoid Strong acids and oxidizing agents

Acid anhydrides

Aluminium

Halogenated compounds

Hazardous Vapours may form explosive mixture with air.

polymerisation

SECTION 11 TOXICOLOGICAL INFORMATION

Acute dermal toxicity LD50 Rabbit: > 2,000 mg/kg (literature value)

Acute inhalation LC50 Rat (8 hours): > 20 mg/l

toxicity (literature value)

Acute oral toxicity LD50 Rat: > 2,000 mg/kg (literature value)

Skin (Rabbit)

corrosion/irritation Not irritating (literature value)

Serious eye (Rabbit)

damage/eye irritation Irritating (literature value)

Respiratory or skin Guinea pig: not sensitizing; Buehler Test

sensitisation (literature value)

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Germ cell mutagenicity Genotoxicity in vitro:

Type: Ames test

System: Salmonella typhimurium; with and without metabolic activation Result: In vitro tests did not show mutagenic effects

(literature value) **Genotoxicity in vivo:**

No data available

Assessment Mutagenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity Reproductive toxicity:

No data available

Assessment Reproductive toxicity:

No data available **Teratogenicity:** No data available

Assessment teratogenicity:

No data available

STOT - single exposure The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with narcotic effects.

STOT - repeated Rat; Oral; 90-day; NOAEL: 1,730 mg/kg

Exposure LOAEL: 3,160 mg/kg

Based on available data, the classification criteria are not met.

Aspiration toxicity No data available

Carcinogenicity Assessment carcinogenicity:

Contains no ingredient listed as a carcinogen

SECTION 12 ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Pimephales promelas (fathead minnow)) 96 hours: > 100 mg/l;

flow-through test (literature value)

Toxicity to aquatic EC50 (Daphnia magna (Water flea)) 24 hours: > 100 mg/l; static test

invertebrates (literature value)

Toxicity to algae EC50 (Scenedesmus quadricauda (Green algae)) 7 d: > 100 mg/l;

static test (literature value)

Chronic toxicity to fish No data available

Chronic toxicity to No data available

aquatic invertebrates

Biodegradation Readily biodegradable. BOD5 (5 d): 53 % (literature value)

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Bioaccumulative No bioaccumulation is to be expected (log Pow<= 4).

potential

Mobility in soil No data available

Other adverse effects This substance is not considered to be persistent, bioaccumulating

and toxic (PBT).

DISPOSAL CONSIDERATIONS SECTION 13

Waste Code D001 - Ignitability (RQ 100 LB). This product has the RCRA

characteristic of ignitability. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change

the classification.

Disposal methods Dispose of only in accordance with local, state, and federal

regulations. Do not contaminate any lakes, streams, ponds,

groundwater or soil.

Empty containers Empty containers retain product residue (liquid and/or vapor) and

can be dangerous. DO NOT PRESSURIZE, 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. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly

returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT UN1219, Isopropanol, 3, II

IATA UN1219, Isopropanol, 3, II

IMDG UN1219, Isopropanol, 3, II

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks No data available

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SECTION 15

REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Listing

<u>Cas-No.</u>

2-Propanol 67-63-0

All chemical substances in this product are either on the TSCA Active Inventory, or in compliance with the inventory.

SARA 302 Status

<u>Components</u> <u>Cas-No.</u> <u>Weight percent</u>

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 311/312 Classification

Flammable liquids, Eye irritation, Specific target organ toxicity - single exposure

SARA 313 Chemical

<u>Components</u> <u>Cas-No.</u> <u>Weight percent</u>

2-Propanol 67-63-0 100 %

US. EPA CERCLA Hazardous Substances (40 CFR 302)

Components Cas-No. Weight percent

none

INTERNATIONAL REGULATIONS

WHMIS Classification

Flammable liquids Category 2

Eye irritation Category 2A

Specific target organ Category 3 (Narcotic effects)

toxicity -single exposure

European Union

Classification according to Regulation (EU) 1272/2008.

Flammable liquids, Category 2

Eye irritation Category 2

Specific target organ Category 3 (Narcotic effects)

toxicity - single exposure

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Australia. Inventory of Chemical Substances (AICS)	Listed
Japan. Inventory of Existing and New Chemical Substances (ENCS)	Listed
Japan. ISHL - Inventory of Chemical Substances	Listed
Canada. Domestic Substances List (DSL) Inventory	Listed
Canada. Non-Domestic Substance Listing (NDSL)	Not listed
Philippines. Inventory of Chemicals/ Chemical Substances (PICCS)	Listed
Korea. Existing Chemicals Inventory (KECI)	Listed
China. Inventory of Existing Chemical Substances (IECSC)	Listed
Mexico. National Inventory of Chemical Substances (INSQ)	Listed
New Zealand. Inventory of Chemical Substances (NZIoC)	Listed
Switzerland. Inventory of Notified New Substances (CHINV)	Listed
Taiwan. National Existing Chemical Inventory (NECI)	Listed

Please note: The names and GAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

STATE REGULATIONS

California Prop. 65

<u>Components</u> <u>Cas-No.</u>

None

SECTION 16

OTHER INFORMATION

	<u>Health</u>	Flammability	Physical Hazard/Instability
HMIS®	2	3	0
NFPA	2	3	0

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