Safety Data Sheet (SDS)

gotparts747

Isopropyl Alcohol (IPA) 70%

SDS Number: 475

Revision Date: 3/11/2019

1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

gotparts747
Green Polymer Systems
P.O. Box 320072
Los Gatos, CA 95032

Contact: gotparts747
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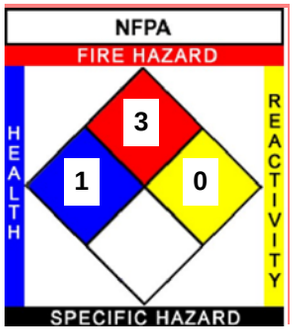
Email: info@gotparts747.com
Web: www.gotparts747.com

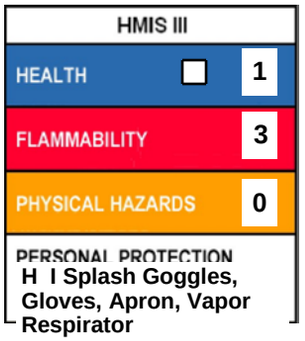
Product Name: Isopropyl Alcohol (IPA) 70%
Revision Date: 3/20/2015
Version: 1
SDS Number: 475
Common Name: IPA, Isopropyl Alcohol, 2-Propanol, sec-Propyl Alcohol, Isopropanol
CAS Number: 67-63-0
Product Code: 10000513
Chemical Family: Alcohols
Chemical Formula: C3H8O
Synonyms: IMAX70; GP-1070 Isopropyl Alcohol; 2-Propanol: Electronic Grade IPA

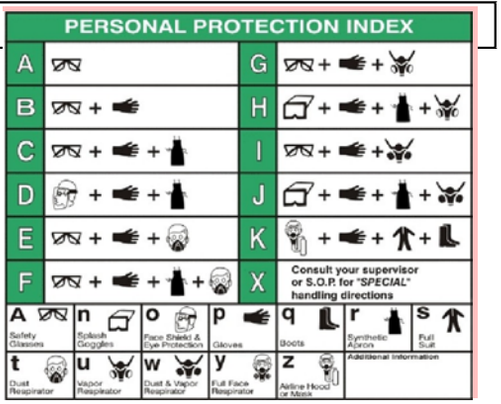
Emergency Phone: (888) 563-4523 or (800) 424-9300 (CHEMTREC, 24 Hours)

2 HAZARDS IDENTIFICATION

NFPA: Health = 1, Fire = 3, Reactivity = 0
HMIS III: H1/F3/PH0







GHS Signal Word:
DANGER

GHS Hazard Pictograms:

GHS Classifications:
Physical, Flammable Liquids, 2
Health, Serious Eye Damage/Eye Irritation, 2 A
Health, Specific target organ toxicity - Single exposure, 3

GHS Hazard Statements:
H225 - Highly flammable liquid and vapor
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness

GHS Precautionary Statements:
P210 - Keep away from heat/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/light/equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
P337+313 - Get medical advice/attention.
P370+378 - In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinction.
P403+233 - Store in a well ventilated place. Keep container tightly closed.
P403+235 - Store in a well ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to an approved waste disposal plant.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CAS #	Percentage	Chemical Name
67-63-0	**70%**	**Isopropyl Alcohol**
7732-18-5	**30%**	**Water**

4 FIRST AID MEASURES

Inhalation:	If inhaled, move person into fresh air. Monitor respiratory function. If breathing is difficult, provide oxygen. If not breathing, give artificial respiration. If symptoms persist, obtain medical attention.
Skin Contact:	Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. Remove contaminated clothing and wash before reuse. Consult a physician if irritation persists.
Eye Contact:	Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses is present and easy to do so. Get medical attention is irritation persists.
Ingestion:	Rinse mouth with water. Do NOT induce vomiting unless instructed to do so. Never give anything by mouth to an unconscious person. If significant amounts are swallowed or irritation or discomfort occurs, seek immediate medical attention.

Most important symptoms and effects, both acute and delayed:
The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Indication of any immediate medical attention and special treatment needed:
No data available

5 FIRE FIGHTING MEASURES

Flammability:	Flammable Liquid Class IB
Flash Point:	12.0 °C (65 °F)
Flash Point Method:	(PMCC)
Burning Rate:	No data available
Autoignition Temp:	399 °C (750 °F)
LEL:	2.0% (V)
UEL:	12.7% (V)

Extinguishing Media:
Water Spray
Carbon Dioxide.
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:
Carbon Oxides

Advice for Firefighters:
Firefighters should wear full-face, positive-pressure respirators.

Further Information:
If incinerated, may release toxic fumes.
Use water spray to cool unopened containers.
Beware of vapors accumulating to form explosive concentrations.
Vapors can accumulate in low areas.
See Section 7 for more information on safe handling.
See Section 8 for more information on personal protection equipment.
See Section 13 for disposal information.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:
Use personal protective equipment, including vapor respirator.
Keep from contacting skin or eyes.
Avoid breathing vapors, mist or gas.
Ensure adequate ventilation.
Evacuate personnel to safe areas.
Remove all sources of ignition.
Stay upwind of any spills.
If any equipment is necessary, ensure that it is non-sparking and electrically-protected.

Environmental Precautions:
Prevent further release (leakage/spillage) if safe to do so.
Do not allow product to enter drains.
Do not allow to drain to environment.

Methods and Materials for Containments and Cleaning Up:
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).
Place contaminated material into suitable, closed containers for disposal.
Spill may also be diluted with equal volume of water and absorbed (as above) or collect with an electrically-protected vacuum cleaner or by wet-brushing. Collected waste should then be placed in container for disposal.
Dispose of contaminated material according to Section 13.

Reference to other sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for information on proper disposal.

7 HANDLING AND STORAGE

Handling Precautions:
Avoid breathing vapors or mist.
Avoid contact with eyes, skin, or clothing.
Keep containers closed when not in use.
Do not expose containers to open flame, excessive heat, or direct sunlight.
Keep away from sources of ignition.
Do not smoke while using material.
Take measures to prevent the buildup of electrostatic charge. Do not puncture or drop containers.
Handle with care and avoid spillage on the floor (slippage).
Keep material out of reach of children.
Keep material away from incompatible materials.
Wash thoroughly after handling.

Storage Requirements:
Keep container tightly closed.
Avoid inhalation of vapors or mist upon opening container.
Store in a well-ventilated place.
Do not store at elevated temperatures.
Do not store in direct sunlight.
Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, acid anhydrides, halogenated compounds, acetaldehyde, chlorine, ethylene oxide, hydrogen-palladium combination, hydrogen peroxide-sulfuric acid combination, potassium

tert-butoxide, hypochlorous acid, isocyanates, nitroform, phosgene, aluminum, oleum and perchloric acid.

S EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip: Eye/face protection:
When using material use safety goggles, gloves apron and vapor respirator according to HMIS PP, H. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection:
Handle with gloves made from PVC, butyl-rubber or fluorinated-rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection:
Chemically resistant gloves, apron, safety goggles and vapor respirator are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection:
Full-face dust/vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure:
Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component: Isopropyl Alcohol
CAS-No: 67-63-0
USA ACGIH (TWA/TLV): 200 ppm
USA ACGIH (STEL/TLV): 400 ppm
USA OSHA Table Z-1 Limits for Air Contaminants (STEL): 500 ppm
USA OSHA Table Z-1 Limits for Air Contaminants (TWA): 400 ppm
USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminant (TWA): 400 ppm
USA NIOSH Recommended Exposure Limits (TWA): 250 ppm
USA NIOSH Recommended Exposure Limits (ST): 500 ppm

Biological occupational exposure limits:

Component: Isopropyl Alcohol
CAS-No: 67-63-0
Parameters: 2-propanone
Biological Specimen: Urine
USA ACGIH Biological Exposure Indices: 40 mg/L

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear, colorless liquid		
Physical State:	Liquid	**Odor:**	Strong, pungent alcohol-like
Odor Threshold:	Not determined	**Molecular Formula:**	C3H8O
Particle Size:	DNA	**Solubility:**	Complete
Spec Grav./Density:	0.86 g/ml	**Softening Point:**	DNA
Viscosity:	Not determined	**Percent Volatile:**	70%
Sat. Vap. Conc.:	Not determined	**Heat Value:**	Not determined
Boiling Point:	82.0 °C (179.6 °F)	**Freezing/Melting Pt.:**	-89.5 °C (-129.1 °F)
Flammability:	(solid, gas): Flammable Liquid Class IB	**Flash Point:**	18.3 °C (65 °F)
Partition Coefficient:	(log Pow): 0.05	**Octanol:**	Not determined
Vapor Pressure:	(mm Hg @ 20 °C): 32.4	**Vapor Density:**	(air = 1): Not determined
pH:	DNA	**VOC:**	NA
Evap. Rate:	(n-Butyl Acetate = 1): 3.0	**Bulk Density:**	Not determined
Molecular weight:	60.1 g/mol	**Auto-Ignition Temp:**	425.0 °C (797.0 °F)
Decomp Temp:	Not determined	**UFL/LFL:**	(V): 12.7% / 2.0%

10 STABILITY AND REACTIVITY

Stability:	Product is stable under normal conditions. Test for peroxide formation before distillation or evaporation. If unsure, discard after one year.
Conditions to Avoid:	Incompatibilities, heat, flames, sparks, ignition source and direct sunlight.
Materials to Avoid:	strong acids, strong bases, strong oxidizing agents, strong reducing agents, acid anhydrides, halogenated compounds, acetaldehyde, chlorine, ethylene oxide, hydrogen-palladium combination, hydrogen peroxide-sulfuric acid combination, potassium tert-butoxide, hypochlorous acid, isocyanates, nitroform, phosgene, aluminum, oleum and perchloric acid.
Hazardous Decomposition:	Carbon Oxides
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Component(s): Isopropyl Alcohol
CAS No(s): 67-63-0

Acute Toxicity:
LD50 Oral - Rat: 5,045 mg/kg
LC50 Inhalation - Rat: 16,000 ppm (8 h)
LD50 Dermal - Rabbit: 12,800 mg/kg

Skin Corrosion/Irritation: Rabbit skin - Causes mild skin irritation.

Serious Eye Damage/Eye Irritation: Rabbit eyes - Causes eye irritation (24 h).

Respiratory or Skin Sensitation: No data available.

Germ Cell Mutagenicity: No data available.

Carcinogenicity:

This product is or contains a component is not classifiable as to its carcinogenicity to humans (Isopropyl Alcohol) based on its IARC, ACGIH, NTP, or OSHA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Isopropyl Alcohol).
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.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.
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.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity · Single Exposure: Respiratory system - May cause drowsiness or dizziness.

Specific Target Organ Toxicity · Repeated Exposure: No data available.

Aspiration Hazard: No data available.

Additional Information:
Component: Isopropyl Alcohol; RTECS: NT8050000

12 ECOLOGICAL INFORMATION

Component(s): Isopropyl Alcohol
CAS No(s): 67-63-0

Toxicity:

Toxicity to fish:
LC50 - Pimephales promelas (Fathead Minnow): 9,640 mg/l (96 h)

Toxicity to daphnia and other aquatic invertebrates:
EC50 - Daphnia magna (Water Flea): 5,102 mg/l (24 h)
Immobilization EC50 - Daphnia magna (Water Flea): 6,851 mg/l (24 h)

Toxicity to algae:
EC50 - Desmodesmus subspicatus (Green Algae): > 2,000 mg/l (72 h)
EC50 - Algae: > 1,000 mg/l (24 h)

Persistence and Degradability:
Readily biodegradable under aerobic conditions.

Bioaccumulative potential:
Does not bioaccumulate (log Pow <= 4).

Mobility in Soil:
No data available.

Results of PBT and vPvB assessment:
Not required/conducted.

Other Adverse Effects:

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13 DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Disposed of as unused product.

14 TRANSPORT INFORMATION

DOT Class: Flammable Liquid (3) #3
UN #: UN 1219, Class: 3, Proper Shipping Name: Isopropyl Alcohol

DOT (US)
UN Number: UN1219
Class: 3
Packing Group: II
ERG #: 129
Proper Shipping Name: Isopropyl Alcohol
Marine Pollutant: No
Poison Inhalation Hazard(s): No

IMDG
UN Number: UN1219
Class: 3
Packing Group: II
EMS-No: F-E, S-D
Proper Shipping Name: Isopropyl Alcohol
Marine Pollutant: No

IATA
UN Number: UN1219
Class: 3
Packing Group: II
ERG #: 129
Proper Shipping Name: Isopropyl Alcohol

15 REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

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*Isopropyl Alcohol (67630 >99.5%) MASS, NJHS, OSHAWAC, PA, SARA311/312, SARA313, TSCA, TXAIR

All ingredients of IMAX isopropyl alcohol are TSCA listed.

REGULATORY KEY DESCRIPTIONS

MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
SARA311/312 = SARA 311/312 Toxic Chemicals
SARA313 = SARA 313 Title III Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Green Polymer Systems and gotparts747 believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Green Polymer Systems and gotparts747's control, GPS and gotparts747 make no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.

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