

SatPax[®] 70% IPA / 30% DI H20 or WFI

30th May 2024

Complying with the Singapore standard SS 586-1:2021 and SS 586-2/3:2022 for Singapore. Complying with GHS Revision 7.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/ UNDERTAKING

1.1 Product identifier Product name:

SatPax ® 70% IPA / 30% DI H2O or WFI

Other means of identification: Product Code Number:

SPX1000.001.12, SPX1000.001.20, SPX100001212, SPX1200.001.12, SPX12000048, SPX12000098, SPX120007018, SPX12001218, SPX120R.001.12, SPX3000.001.12, SPX550.001.24, SPX550.003.36, SPX550.004.24, SPX550.005.36, SPX55000624LE, SPX55000924, SPX550070830, SPX570.001.24, SPX670909012, SPX670230912, SPX67091112, SPX670R.001.12, SPX670RBL00112, SPX680A00124, SPXC1000.01.12R, SPXC100000112, SPXC100000412, SPXC100000412R, SPXCCH500112, SPXCHN500112, SPXCHN500112, SPXCHN500112, SPXCHN500112, SPXCHN500112, SPXCHN500112, SPXCHN500112, SPXCHN500112, SPXCHN600112, SPXCHN600112, SPXCHN600112, SPXCPNW00312R, SPXEC360P40, SPXHAR.001.12, SPXHAR.01.8, SPXMPNW500112R, SPXMP110000112, SPXMPX2750012, SPXMSVP06B16, SPXPNW00112, SPXVP00112R, SPXVP00312, SPXVP1000112, SPXVPR0112, SPXVPR0112, SPXVPR0124, SPXVPR0112, SPXVPR0112, SPXVPR0112, SPXVPR0124, SPXVPR0112, SPXVPR0124, SPXVPR0112, SPXVPR0124, SPXVPR0112, SPXVPR0124, SPXVPR0124, SPXVPR0124, SPXVPR0112, SPXVPR0124, SPXVPR0248, SPXVPR0124, SPXVPR0248, SPXVPR0248, SPXVPR0248, SPXVPR0248, SPXVPR0248, SPXVPR0248, SPXVPR0244, SPXVPR0244,

SSP100000124, SSP120000224, SSP120000312, SSP12000047, SSP1200110WFI, SSP1200112WFI, SSP300000112, SSP55000424, SSP55000524, SSP55000524LE, SSP67000124, SSPCPVP0112, SSPEC360P40, SSPEC360P40P SPHA00112, SSPHA.001.12P, SSPMFLP00124LE, SSPMS015WFI, SSPMSVP028, SSPPNW00124, SSPVCLP00136, SSPVP00110LE, SSPVP00112LE, SSPVP00124, SSPVP00212LE, SSPVP00124, SSPVP00118

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses:	Wiping and cleaning various surfaces and components. For professional
	use only.
Uses advised against:	Uses other than those described above.

1.3 Details of the supplier of	the safety data sheet
Head Office	
Company Name:	Berkshire Corporation
Company Address:	21 River Street, Great Barrington,
	MA 01230, USA
Company Tel (Enquiries):	1-800-242-7000
E-mail address of person	ghs@berkshire.com
responsible for this SDS:	-

1.4 Emergency telephone number

Emergency telephone number (including hours of operation):

CHEMTREC, APAC.: +65 3163 8374. Singapore: +65 3158 1349 & toll free 800 101 2201 24/7

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation SS 586



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Product name	GHS Classification
SatPax [®] 70% IPA / 30% DI H2O or WFI	Flammable liquid, category 2 H225 Eye Irritation, category 2 H319 Specific target organ toxicity, single exposure, category 3 H336

2.2 Label elements

Labelling in accordance with Regulation SS 586 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:	 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 - Avoid breathing dust/fume/gas/mist/ vapours/spray. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 - Call a POISON CENTRE/doctor if you feel unwell. P403+P235 - Store in a well-ventilated place. Keep cool
Supplemental Hazard Information:	Repeated exposure may cause skin dryness or cracking

2.3 Other hazards

This substance/mixture contains no components considered to be an endocrine-disrupting substance, persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1Substances : Not applicable

3.2 Mixture :



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Chemical name	Common name and synonyms	CAS Number	%
Isopropyl Alcohol	Propan-2-ol	67-63-0	70%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Get medical attention. If necessary, call a poison center or physician.

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

Skin contact: Wash with water and soap and rinse thoroughly. Seek medical advice if irritation or pain develops.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation. Adverse symptoms may include the following: pain or irritation, watering, redness. May cause drowsiness or dizziness. Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

4.3 Indication of any immediate medical attention and special treatment needed

If any symptoms are observed, contact a physician and give them this SDS sheet. Provide general supportive measures and treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media:

<u>Suitable extinguishing media:</u> Use dry chemical, CO2, water spray (fog) or foam. <u>Unsuitable extinguishing media:</u> Do not use water jet as an extinguisher, as this will spread the fire

5.2 Special hazards arising from the substance or mixture

Highly flammable liquid and vapour.

Will be easily ignited by heat, sparks or flames. Vapours may form explosive mixtures with air. Vapours may travel to source of ignition and flash back. Most vapours are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapour explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water.



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Hazardous combustion products: Carbon monoxide, carbon dioxide.

5.3 Advice for firefighters

Use water spray or fog for cooling exposed containers. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate all non-emergency personnel from area. Irritating substances may be released during a fire including carbon oxides. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering.

For emergency responders

Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. If spill occurs on water notify appropriate authorities.

6.3 Methods and materials for containment and cleaning up

Small spill: Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosionproof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible



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materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values:

Chemical component	CAS Number	Singapore Occupational Exposure Limits
Isopropyl Alcohol	67-63-0	400 ppm, 983 mg/m3 PEL 500 ppm STEL; 1230 mg/m3 STEL

8.2 Exposure controls

Appropriate Engineering Measures

Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended. Concentrations should be monitored hazardous substances in the workplace in accordance with recognized test methods. Mode, method, type and frequency of testing and measurement of harmful factors in the working environment should meet the requirements of local/regional/national laws.

Individual protection measures, such as personal protective equipment:

Eye and face protection: Wear safety glasses, safety glasses with side shields or safety goggles. Use equipment for eye protection evaluated and approved under NIOSH/local standards.

Skin protection:

<u>Hand protection</u>: 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.

<u>Other skin protection:</u> 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.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Where risk assessment shows respirators are appropriate use an organic vapour respirator as a backup to engineering controls. Use respirators and components evaluated and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards: None known.

Environmental exposure controls: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State:	Liquid (Solid wipes containing liquid)
Colour:	White substrate with a colourless liquid
Odour and odour threshold:	Rubbing alcohol
Melting point/Freezing point: Boiling point or initial boiling	Not available .
point and boiling range:	Not available
Flammability:	Highly flammable liquid and vapour.
Lower and upper explosion limit	
Lower (%):	2
Upper (%):	12.7
Flash point:	18 C – closed cup.
Auto-ignition temperature:	399°C
Decomposition temperature: pH:	Not available 7
Dynamic viscosity:	, Not available
Solubility:	Insoluble in water
Partition coefficient	
n-octanol/water (log value): Vapour pressure:	Not available Not available
Density and/or relative density:	Not available
Relative vapour density:	Not available
Particle characteristics:	Not applicable - liquid
9.2 Other information:	
Information with Regard to Physical Hazard Classes:	None known
Other Safety Characteristics:	None known

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Not reactive under recommended storage and handling conditions.

10.2 Chemical stability

Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions not anticipated under recommended storage and handling conditions

10.4 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.

10.5 Incompatible materials

Strong oxidizing agents.



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10.6 Hazardous Decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced. During a fire irritating and toxic substances will be released including carbon monoxide, carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity:

Does not meet the criteria for classification.

Substance	Test Type (species)	Value
Isopropyl Alcohol	LD ₅₀ Oral (Rat)	5840 mg/kg
	LD ₅₀ Dermal (Rabbit)	13900 mg/kg
	LC ₅₀ Inhalation (Rat)	> 10000 ppm 6h

Skin corrosion/irritation:	Does not meet the criteria for classification.	
Serious eye damage/eye irritation:	Causes serious eye irritation. Adverse symptoms may include the following: pain or irritation, watering, redness.	
Respiratory or skin sensitization:	Does not meet the criteria for classification.	
Germ cell mutagenicity:	Does not meet the criteria for classification.	
Carcinogenicity:	Does not meet the criteria for classification.	
Reproductive toxicity:	Does not meet the criteria for classification.	
STOT – Single exposure:	May cause drowsiness or dizziness. Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.	
STOT – Repeat exposure:	Does not meet the criteria for classification.	
Aspiration hazard:	Does not meet the criteria for classification.	
11.2 Information on other hazards:		
Endocrine disrupting properties:	None of the components have endocrine disrupting properties	
Information on other hazards:	None known	
Information on likely routes of expo Inhalation: Expected to be a route		
Ingestion: Expected to be a route	e of exposure	
Skin: Expected to be a route of exposure		
Eyes: Expected to be a route of exposure		
	nical and toxicological characteristics	

Causes serious eye irritation. Adverse symptoms may include the following: pain or irritation, watering, redness. May cause respiratory irritation. Causes damage to the central nervous system. Adverse symptoms may include the following: nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, unconsciousness.

Interactive effects:

No additional information known.



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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Substance	Test Type	Species	Value
	LC ₅₀	Fish - Pimephales promelas	10000 mg/L 96 h
Isopropyl Alcohol	EC ₅₀	Aquatic Invertebrates - Daphnia magna	> 10000 mg/L 48 h
	NOEC	Algae - Scenedesmus quadricauda	1800 mg/L 7d

12.2 Persistence and Degradability:

No data available for this product

12.3 Bioaccumulative potential:

Isopropanol - LogPow -0.05 Low potential

12.4 Mobility in soil:

No data available for this product

12.5 Other adverse effects:

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Methods of disposal:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Dispose via a licensed waste disposal contractor. Observe all federal, state/provincial and municipal regulations.

Hazardous Waste

The classification of the product may meet the criteria for a hazardous waste.

Contaminated packaging – methods of disposal

Since emptied containers retain product residue, follow label warnings even after container is emptied. Empty containers should be properly labeled to supplier or everywhere there is a recovery program.

Special precautions

This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid disposal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: TRANSPORT INFORMATION

International transport regulations

<u>14.1 UN</u>	<u>number:</u>
ADR/RI	D: UN 3175

IMDG: UN 3175

IATA: UN 3175

14.2 Proper shipping name:

ADR/RID: SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (Isopropanol)

IMDG:

SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.(Isopropanol)



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IATA:	SOLIDS CONTAINING FLAMMAB	LE LIQUID, N.O.S.(Isopropanol)
14.3 Transport hazar ADR/RID: 4.1	r <mark>d class(es)</mark> <u>IMDG</u> : 4.1	<u>IATA:</u> 4.1
14 4 Packing group		

<u>ADR/RID:</u> II IATA: II

Limited Quantity Information:

Asia Pacific: May be shipped as limited quantity. Review all applicable national regulations prior to shipping the material.

IMDG: May be shipped as Limited Quantity when transported in inner containers not larger than 1 kg; in packages not exceeding 30 kg gross weight. Refer to IMDG Code Section 3.4 for additional information.

IATA: May be shipped as Limited Quantity when transported in inner containers not larger than 0.5 kg and not more than 5 kg total net quantity per package. Refer to Section 2.7 and appropriate Packing Instruction for additional information. Review all State and Operator Variations prior to shipping the material.

14.5 Environmental hazard

Marine Pollutant: Not expected

14.6 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.

14.7 Maritime transport in bulk according to IMO instruments

No additional information

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Singapore List of Controlled Hazardous Substances under EMPA:

Isopropyl alcohol is not listed.

Singapore Ozone Depleting Substances (ODS):

Isopropyl alcohol is not listed.

Singapore - Petroleum and Flammable Materials - Regulated Products:

Chemical Name	CAS number	Regulated Products	Hazard classes
Isopropyl alcohol	67-63-0	SCDIPA1219L2 ([1- 193], listed under Flammable material)	3 ([1-193], listed under Flammable material)

Singapore - Petroleum and Flammable Materials - Harmonized System Codes:

Chemical Name	CAS number	Harmonized System Codes
Isopropyl alcohol	67-63-0	Harmonized system code 29051200



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Singapore - Exemption Threshold Quantities for Flammable Materials Storage Licensing - General Manufacturing Purposes:

Chemical Name	CAS number	Exemption Threshold Quantities
Isopropyl alcohol	67-63-0	20 L ([153])

SECTION 16: OTHER INFORMATION		
Initial versior	n: 30 th May 2024	
Revision Nur	nber: 1	
Full text of H	and P-Statements referred to under sections 2 and 3.	
H225	Highly flammable liquid and vapour	
H319	Causes serious eye irritation	
H336	May cause drowsiness or dizziness	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.	
P233	Keep container tightly closed.	
P235	Keep cool.	
P240	Ground and bond container and receiving equipment.	
P241	Use explosion-proof [electrical/ventilating/ lighting] equipment.	
P242	Use non-sparking tools.	
P243	Take action to prevent static discharges	
P261	Avoid breathing dust/fume/gas/mist/ vapours/spray.	
P264	Wash thoroughly after handling	
P271	Use only outdoors or in a well-ventilated area.	
P280	Wear protective gloves/protective clothing/eye protection/face protection.	
	P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with	
	water [or shower].	
P304+P340	If INHALED: Remove person to fresh air and keep comfortable for breathing.	
	P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P312	Call a POISON CENTRE/doctor if you feel unwell.	
P337+P313	If eye irritation persists: Get medical advice/attention	
P370+P378	In case of fire: Use water spray (fog), carbon dioxide (CO2), dry chemical powder or foam to extinguish.	
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	
P501	Dispose of contents/container to a suitable disposal site in accordance with	
	local/regional/national/international regulations	
Abbreviation	s and acronyms:	
ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European	
CAS:	Chemical Abstracts Service (division of the American Chemical Society)	
EC50:	Half maximal effective concentration	
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals	
IATA:	International Air Transport Association	
IBC:	International Bulk Code	
IMDG:	International Maritime Code for Dangerous Goods	
IOELV:	Indicative Occupational Exposure Limit Value	



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LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
MARPOL:	International Convention for the Prevention of Pollution from Ships
OEL:	Occupational Exposure Level
PBT:	Persistent, Bioaccumulative and Toxic
SCBA:	Self Contained Breathing Apparatus
SCL:	Specific Concentration Limits
UN:	United Nations
VPvB:	Very Persistent and very Bioaccumulative

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