



Material Safety Data Sheet/Safety Data Sheet
Wipers Presaturated with 50% IPA / 50% WFI or DIW

EMERGENCY PHONE NUMBER:
CHEMTREC 1(800) 424-9300
24 HOURS/DAY, 7 DAYS/WEEK

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

Product (Trade) Name: SatPax Durx 50% IPA / 50% DI H₂O
Product Identification Number: SPX670.003.12, SPX670.001.0911.12, SPX670M.005.12
Product Description: Wetted wipers containing Isopropyl Alcohol / Water Solution
Manufacturer: Berkshire International, 95 Ewell Road, Surbiton, Surrey, KT6 6AH
Contact Information: Telephone: 44 (0) 870 757 2877 Fax: 44 (0) 870 757 2878
Web: www.berkshire.com
Emergency Contact Information: Chemtrec International: (202) 483-7616

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

Substance/preparation: -THIS PRODUCT IS A PREPARATION

Hazardous Ingredients	Isopropyl Alcohol	Deionised water	Product Information
CAS#	67-63-0	7732-18-5	N/A
EINECS-No	200-661-7	231-791-2	N/A
vol / vol %	50	50	N/A
Chemical Family:	Alcohol	N/A	N/A
Chemical Formula:	(CH ₃) ₂ CHO3	H ₂ O	N/A
Synonyms:	Isopropanol, 2-Propanol, Isopropyl Alcohol, IPA	DI H ₂ O, Water, DI Water, DIW, WFI	N/A
EU Classification (67/548/EEC)	F; R11 Xi; R36, R67		
R-Phrases	11,36,67	N/A	11,36,67

SECTION 3 – HAZARDS IDENTIFICATION

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

R-Phrases R11 Highly flammable. R 36 Irritating to eyes. R 67 Vapors may cause drowsiness and dizziness.
Physical/chemical Hazard status Warning ! Flammable solid
Human health hazards Irritating to Eyes
Vapours may cause drowsiness and dizziness.

SECTION 4 – FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Obtain medical attention if symptoms occur.
Skin Contact Wash with soap and water. Obtain medical attention if symptoms occur.
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
Protection of first-aiders No action shall be taken involving any personal risk without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self contained breathing apparatus. It may be dangerous to the person providing aid to give mouth to mouth resuscitation.

SECTION 5 – FIRE FIGHTING MEASURES

Extinguisher Media:
Use Dry Chemical powder. Water may be used to cool containers exposed to fire.

Special exposure hazards: Flammable solid. Runoff to sewer may create fire or explosion hazard
Hazardous thermal decomposition products: These products are carbon oxides
Special protective equipment for fire-fighters: Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions: Use suitable protective equipment
Environmental precautions: Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.
Methods of cleaning up: Place spilt material in a appropriate container for disposal.

SECTION 7 – HANDLING AND STORAGE

Handling: Avoid contact with eyes. Use only with adequate ventilation. Avoid breathing vapour or mist. Keep away from heat, sparks and flame. Wash thoroughly after handling.
Storage: Keep container in a cool, well ventilated area. Keep container tightly closed and sealed until ready for use.
Packaging materials recommended: Use original container.

SECTION 8 – EXPOSURE CONTROL/PERSONAL PROTECTION

Recommended monitoring procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. References should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

Exposure controls Occupational exposure controls Use only with adequate ventilation. If user operations generate dust, fumes, vapour or mist, use process enclosure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment .

Eye Protection: Use approved safety chemical goggles.

Skin Protection: Use of impervious protective clothing is recommended

Respiratory protection: A respirator is not needed under normal and intended conditions of product use.

Hand protection: Natural rubber latex

Hygiene measures Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. During formulation, follow good industrial hygiene practice.

Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Chemical Name: Isopropanol (propan-2-ol)	Exposure limits
EU UK-EH40	200 PPM DFG MAK EH40-WEL STEL: 1250mg/m3 15 minutes all forms STEL: 500 ppm 15 minutes all forms TWA: 999mg/m3 8 hours all forms TWA: 400ppm 8 hours all forms
Germany-DFG	TRGS900 MAK- Germany 8/2004 Spitzenbegrenzung: 2000 mg/m3 15 minutes all forms Spitzenbegrenzung: 800ppm 15 minutes all forms TWA: 500mg/m3 8 hours all forms TWA: 200 ppm 8 hours all forms
France	INRS (France, 2/2005)

Netherlands	VLE: 980 mg/m ³ 15 minutes all forms VLE: 400 ppm 15 minutes all forms National Mac-Lijst (Netherlands, 12/2004) TGG: 650 mg/m ³ 8 hours all forms TGG: 250 ppm 8 hours all forms
Belgium	Lijst Grenswaarden/ Valeurs Limites (Belgium 12/2003) STEL: 1248 mg/m ³ 15 minutes all forms STEL: 500 ppm 15 minutes all forms TWA: 500mg/m ³ 8 hours all forms TWA: 200 ppm 8 hours all forms
Spain	INSHT (Spain, 10/2004) VLA-EC: 1250 mg/m ³ 15 minutes all forms VLA-EC: 500 ppm 15 minutes all forms VLA-ED: 998 mg/m ³ 8 hours all forms VLA-ED: 400 ppm 8 hours all forms
Ireland	NAOSH (Ireland, 3/2002). Skin OELV: 1225 mg/m ³ 15 minutes all forms OELV: 500 ppm 15 minutes All forms OELV: 980 mg/m ³ 8 hours all forms OELV: 400 ppm 8 hours all forms

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

General information

Appearance

Physical state: Solid (cloth wiper)

Colour: Cloth: white. Isopropanol alcohol: Colourless

Odour: Rubbing alcohol

Important health, safety and environmental information

pH

Neutral

Flash point:

Close cup: 23 °C (74 °F)

Flammability (solid, gas)

Highly flammable solid

Explosion limits:

Lower: 2% Upper: 12.7%

Relative density:

Weight average: 0.84 (water=1)

Solubility:

Insoluble

Other information

Auto ignition temperature: 399 °C (750.2 °F)

SECTION 10 – STABILITY AND REACTIVITY

Stability

Product is Stable.

Materials to avoid

Reactive with oxidizing materials

SECTION 11 – TOXICOLOGY INFORMATION

Potential acute health effects

Inhalation: Harmful by Inhalation.

Ingestion: No know significant effects or critical hazards.

Skin contact: No know significant effects or critical hazards.

Eye contact: Irritating to eyes.

Acute toxicity:

Product/ingredient name	Test	Results	Route	Species
Propanol-2-ol	LD50	5045 mg/kg	Oral	Rat
	LD50	6410 mg/kg	Oral	Rabbit
	LD50	3600mg/kg	Oral	Mouse
	LD50	12,800mg/kg	Dermal	Rabbit
	LC50	16,000 ppm/8 hour	inhalation	Rat

Potential chronic health effects

Carcinogenicity : No know significant effects or critical hazards.

Mutagenicity : No know significant effects or critical hazards.

Reproductive toxicity : No know significant effects or critical hazards.

Over exposure signs/symptoms

Inhalation : No know significant effects or critical hazards.

Ingestion : No know significant effects or critical hazards.

Skin : No know significant effects or critical hazards.

Target organs : Contains material which may cause damage to the following organs: Central nervous system

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity Data

Ingredient name	Species	Period	Result
Propan-2-ol	Pimephales promelas EC50	48 hours	10000mg/l
	Lepomis macrochirus LC50	96 hours	>1400 mg/l
	Pimephales promelas (LC50)	96 hours	6550 mg/l
	Pimephales promelas (LC50)	96 hours	9640mg/l
	Pimephales promelas (LC50)	96 hours	10400 mg/l
	Pimephales promelas (LC50)	96 hours	11130 mg/l

Mobility

Soluble in water. Large volumes may penetrate soil and contaminate ground water

Persistence / degradability

When released in to water, expected to have ½ life between 1 and 10 days.

Bio-accumulation

Not expected to bio-accumulate.

Aquatic toxicity

The LCD50/96-hour values for fish are over 100mg/l. Not toxic to aquatic life.


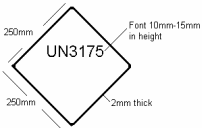

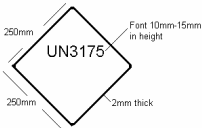

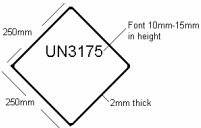
SECTION 13 – DISPOSAL CONSIDERATIONS

METHOD OF DISPOSAL: The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spill material, runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

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

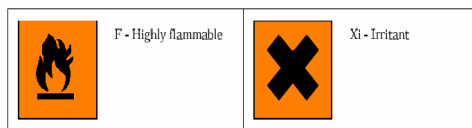
14. Transport information

Transportation Mode:	<u>International Ocean (IMDG)</u>	<u>International Air (IATA)</u>	<u>ADR European Road&Rail</u>
Proper Shipping Name	Solids containing flammable liquid, n.o.s (isopropanol)	Solids containing flammable liquid, n.o.s (isopropanol)	Solids containing flammable liquid, n.o.s (isopropanol)
Hazard Class	4.1	4.1	4.1
UN or ID Number	UN3175	UN3175	UN3175
Packing Group:	II	II	II

Hazard Label:	Class 4.1  If not LTD QTY 	Class 4.1  If not LTD QTY 	Class 4.1  If not LTD QTY 
Handling Labels	N/A	N/A	N/A
Marine Pollutant Hazard Marking	NO	N/A	N/A
	CHIP flammable and Irritant on product label	CHIP flammable and Irritant on product label	CHIP flammable and Irritant on product label
Packaging Instructions:	P002	Cargo Air In UN specified box 417 or Passenger Air Y415 if LTD QTY-see sec.16	P002
Vessel Stowage:	B		

SECTION 15 – REGULATORY INFORMATION

EU Regulations



Hazardous symbol/symbols:

Risk phrases : R11 Highly flammable. R 36 Irritating to eyes. R 67 Vapors may cause drowsiness and dizziness.

Safety phrases: S 2 Keep out of reach of children. S 7 Keep container tightly closed. S 16 Keep away from sources of ignition – No smoking. S 24/25 Avoid contact with skin and eyes. S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Product use: Classification and labeling have been performed according to EU directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use. – Industrial applications.

National regulations

France

Professional disease/diseases : Propan-2-ol Table number/numbers : 84

Germany

Employment restrictions in accordance with section 15b of the Hazardous Substance Ordinance

Hazardous incident ordinance: Yes

Hazardous class of water : 1

Italy Emission control directive : Not classified

SECTION 16 – OTHER INFORMATION

Full text of R-phrases referred to in sections 2 and 3 – UK

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness

F – Highly flammable Xi – Irritant

Rev.10/08

Page 5 of 6

Full text of R-phrases referred to in sections 2 and 3 – France

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness
F – Highly flammable Xi – Irritant

Full text of R-phrases referred to in sections 2 and 3 – Netherlands

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness
F – Highly flammable Xi – Irritant

Full text of R-phrases referred to in sections 2 and 3 – Germany

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness
F – Highly flammable Xi – Irritant

Full text of R-phrases referred to in sections 2 and 3 – Belgium

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness
F – Highly flammable Xi – Irritant

Full text of R-phrases referred to in sections 2 and 3 – Spain

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness
F – Highly flammable Xi – Irritant

Full text of R-phrases referred to in sections 2 and 3 – Italy

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness
F – Highly flammable Xi – Irritant

Full text of R-phrases referred to in sections 2 and 3 – Ireland

R11 – Highly flammable R36 – Irritating to eyes. R67 – Vapours may cause drowsiness and dizziness
F – Highly flammable Xi – Irritant

Date of issue:

The information contained herein is compiled in good faith from manufactures of chemical components, internal reports, and professional publication with respect to contents of this product. This document is intended only as a guide to assist in appropriate precautions and evaluating suitability for handling material by properly trained persons using this product. It is furnished without warranty of any kind, expressed or implied. All information used must be determined by the user to be in accordance with applicable local, state, and federal laws, and regulations