SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name:	**IPA Wipes**
Substance name:	**Isopropyl Alcohol, 70%**

Identification numbers

CAS no.:	67-63-0
EC no.:	200-661-7

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

Relevant identified uses of the substance and mixture

Potential use as a cleaner and protector for wide range of electrical equipment and different kind of surfaces.

Uses advised against

No data available.

Reference to relevant exposure scenarious

For an overview of the exact titles of the relevant exposure scenarious please refer to section 16 of this SDS.

1.3 Details of the supplier of the safety data sheet

Address

Company name:	**Devonshire Industries Ltd.**
Address:	87 Farnham Dr., Beaconsfield QC H9W 5H7 Canada
Telephone:	+1.877.631.4111
Contact Person:	Peter Hartlen (peter@icloth.io)
Web:	https://icloth.io

1.4 Emergency telephone number

Within USA & Canada:	+1.800.424.9300 CCN693143
Outside USA & Canada:	+1.703.527.3887 (collect calls accepted)

24 Hour Emergency Response

American Association of Poison Control Centers

+1.800.222.1222 (Staffed 24/7)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with: US Regulation 29 CFR 1910.1200 (HazCom2012):

Flammable liquids	Category 2
Eye irritation	Category 2
STOT SE	Category 3

2.2 Label elements

Hazard pictograms:

Product identifier: IPA Wipes

Signal word: DANGER

Hazard statements:

H225	Highly flammable liquid and vapor.
H319	Causes serious eye irritation.

H336	May cause drowsiness or dizziness

Precautionary statements:

P210	Keep away from heat, sparks, open flames, and hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing mist, spray, vapours.
P264	Wash hands thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear eye protection.
P312	Call a doctor 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 attention
P304 + 340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P303+361+353	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.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents and container according to federal, state/provincial and municipal regulations.

2.3 Other hazards

Normal and recommended use of wet wipes is unlikely to present any hazard. Risk of exposure occurs only if the wet wipes are treated wrong or abused. However, classifying cloth-like wipes saturated with a hazardous solution is determined by the classification of the liquid.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical characterization

Substance name:	**IPA Wipes - Isopropyl Alcohol, 70%**
Identification numbers:	
CAS no.:	**67-63-0**
EC no.:	**200-661-7**

3.2 Mixtures

The classification of the wipe saturated with a hazardous liquid is determined by the classification of the liquid (https://www.osha.gov/laws-regs/standardinterpretations/2021-04-23). Total level of the isopropyl alcohol per wipe is less then 8ml.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give alcohol to drink.

After inhalation
Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.
After skin contact
Take off immediately all contaminated clothing. Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.
After eye contact
Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.
After ingestion
Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Give activated charcoal. Call Poison Information Centre.Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Doctor: gastric lavage.

4.2 Most important symptoms and efects, both acute and delayed
Symptoms
After inhalation: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.
After skin contact: Dry skin.
After eye contact: Irritation of the eye tissue.
After ingestion: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. Body temperature fall. Slowing respiration.
Chronic symptoms: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.
Efects
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Water spray. Polyvalent foam. Alcohol-resistant foam. BC powder. Carbon dioxide. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media
Solid water jet ineffective as extinguishing medium.

5.2 Special hazards arising from the substance or mixture
Highly flammable. Gas/vapour flammable with air within explosion limits. May be ignited by sparks. Upon combustion: CO and CO_2 are formed. Violent to explosive reaction with (strong) oxidizers. Prolonged storage/in large quantities: may form peroxides.

5.3 Advice for firefighters
Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SECTION 6: Accident release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Keep containers closed. Wash contaminated clothes. Use personal protective equipment.
For emergency responders
Keep upwind. Mark the danger area. Consider evacuation. Seal off low-lying areas. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosion proof appliances and lighting equipment.

6.2 Environmental precautions
Do not allow to enter drains or waterways. Do not flush into surface water or sanitary system.

6.3 Methods and material for containment and cleaning up
Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Dam up the liquid spill. Try to reduce evaporation. Measure the concentration of the explosive gas-air mixture. Dilute/disperse combustible gas/vapour with water curtain. Provide equipment/receptacles with earthing. Do not use compressed air for pumping over spills.
Take up liquid spill into absorbent material, e.g.: dry sand/earth/vermiculite or powdered limestone. Scoop absorbed substance into closing containers. Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4 Reference to other sections
Information regarding waste disposal, see chapter 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Advice on safe handling
Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Handle uncleaned empty containers as full ones. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Do not use compressed air for pumping over. Observe normal hygiene standards. Keep container tightly closed. Measure the concentration in the air regularly. Work under local exhaust/ventilation.

General protective and hygiene measures
Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes. Do not inhale vapours. Keep away from foodstuffs and beverages.

Advice on protection against fire and explosion
Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

7.2 Conditions for safe storage, including any incompatibilities
Technical measures and storage conditions
Wet Wipes are hermetically sealed in a foil structure. Storage: cool and dry.

Requirements for storage rooms and vessels
Keep only in the original packaging. Avoid direct sunlight, heat sources and sources of ignition. Ventilation at floor level. Fireproof storeroom. Provide for an automatic sprinkler system. Provide for a tub to collect spills. Provide the tank with earthing. May be stored under nitrogen.

Advice on storage assembly
Do not store together with oxidizing agents, silver nitrate and sodium hypochlorite.

7.3 Specific end use(s)
No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters - Occupational exposure limit values
Isopropanol 70%

US (OSHA PEL):	TWA	4000 ppm/980 mg/m^3
US (ACGIH):	TWA	200 ppm
US (ACGIH):	STEL	200 ppm

8.2 Exposure controls
Appropriate engineering controls
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide ventilation at floor level. Fireproof storeroom. Provide for an automatic sprinkler system. Provide for a tub to collect spills.
Personal protective equipment
Respiratory protection
Wear gas mask with filter type A.
Eye / face protection
Safety glasses.
Hand protection
Gloves. Materials for protective clothing: butyl rubber. nitrile rubber. viton. polyethylene/ethylenevinylalcohol, neoprene, PVC.
Other
No data available.
Environmental exposure controls
See Section 12.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance (physical state, color, etc.): Liquid. Colorless liquid / invisible vapor.
Upper/lower flammability or explosive limits: 2–13 vol %, 50 – 335 g/m^3
Odor: Alcohol odour.
Vapor pressure: 44 hPa, 229 hPa at 50°C
Vapor density: 2.1 at 20°C
pH: N/A
Relative Density: 0.88 g/mL
Melting point/freezing point: N/A
Solubility(ies): Completely soluble
Initial boiling point and boiling range: 82°C
Flash point: 12°C
Evaporation rate: 2.3 (butylacetate=1), 21 (ether=1)
Flammability (solid, gas): Yes.
Partition coeficient: N/A
Auto-ignition temperature: 399°C
Decomposition temperature: N/A
Viscosity: N/A

9.2 Other information
Gas/vapour heavier than air at 20°C. Clear. Volatile.

SECTION 10: Stability and reactivity

10.1 Reactivity
Upon combustion: CO and CO2 are formed. Violent to explosive reaction with (strong) oxidizer. Prolonged storage/in large quantities: may form peroxides.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous polymerization does not occur.

10.4 Conditions to avoid
Direct sunlight. Heat. High temperature. Incompatible materials. Open flame. Sparks. .

10.5 Incompatible materials
May react violently with alkalis. May react violently with acids.

10.6 Hazardous decomposition products
Carbon dioxide. Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute oral toxicity.
LD50 oral rat: 5045 mg/kg (5840 mg/kg bodyweight; Rat; Rat; Experimental value,5840 mg/kg bodyweight; Rat; Rat; Experimental value)
Acute dermal toxicity.
LD50 dermal rabbit: 12870 mg/kg (16.4; Rabbit; Rabbit; Experimental value,16.4; Rabbit; Rabbit; Experimental value)
Acute inhalation toxicity.
LC50 inhalation rat (mg/l): 73 mg/l/4h (Rat)
Skin corrosion/irritation.
Not classified.
Serious eye damage/irritation.
Causes serious eye irritation.
Respiratory or skin sensitization.
Not classified.
Germ cell mutagenicity.
Not classified.
Reproduction toxicity.
Not classified.
Carcinogenicity.
Not classified.
STOT – single exposure.
May cause drowsiness or dizziness.
STOT – repeated exposure.
Not classified.
Aspiration hazard.
Not classified.
Symptoms/injuries after inhalation.
EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Dry/sore throat. Central nervous system depression. Dizziness. Headache. Narcosis.
Symptoms/injuries after skin contact.
Dry skin.
Symptoms/injuries after eye contact.
Irritation of the eye tissue.
Symptoms/injuries after ingestion.
AFTER ABSORPTION OF HIGH QUANTITIES: Central nervous system depression. Headache. Dilation of the blood vessels. Low arterial pressure. Nausea. Vomiting. Abdominal pain. Disturbed motor response. Disturbances of consciousness. FOLLOWING SYMPTOMS MAY APPEAR LATER: Body temperature fall. Slowing respiration.
Chronic symptoms.
ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

SECTION 12: Ecological information

12.1 Toxicity
Toxicity to fish
LC50 fishes 1: 4200 mg/l (96 h; Rasbora heteromorpha; Flow-through system).
Not determined.
LC50 fish 2: 9640 mg/l (96 h; Pimephales promelas; Lethal)
Toxicity to Daphnia
EC50 Daphnia 1: > 10000 mg/l (48 h; Daphnia magna)
EC50 Daphnia 2: 13299 mg/l (48 h; Daphnia magna)
Toxicity to algae (acute)
Threshold limit algae 1: > 1000 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
Threshold limit algae 2: 1800 mg/l (72 h; Algae; Cell numbers)
Bacteria toxicity
Not determined.

12.2 Persistence and degradability
Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions.
No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD): 1.19 g O^2/g substance
Chemical oxygen demand (COD): 2.23 g O^2/g substance
ThOD: 2.40 g O^2/g substance
BOD (% of ThOD): 0.49 % ThOD

12.3 Bioaccumulative potential
Low potential for bioaccumulation (Log Kow < 4).

12.4 Mobility in soil
Surface tension: 0.021 N/m (25 °C).

12.5 Results of PBT and vPvB assessment
None.

12.6 Other adverse effects
No data available.

12.7 Other information
Do not flush into aquatic environment or drains.

SECTION 13: Disposal consideration

13.1 Waste treatment methods

Waste disposal recommendations
Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Remove to an authorized waste incinerator for solvents with energy recovery. Do not discharge into surface water. Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

Additional information
LWCA (the Netherlands): KGA category 03. Hazardous waste according to Directive 2008/98/EC.

SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

UN-No:	3175
Proper Shipping Name:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol)
Hazard Class:	4.1
Packing Group:	II
Classification code (ADR) :	F1
Special provisions (ADR) :	216, 274, 601
Limited quantities (ADR) :	1kg
Excepted quantities (ADR) :	E2
Packing instructions (ADR) :	P002, IBC06, R001
Special packing provisions (ADR) :	PP9
Mixed packing provisions (ADR) :	MP11
Portable tank and bulk container instructions (ADR) :	T3, BK1, BK2
Portable tank and bulk container special provisions (ADR):	TP33
Vehicle for tank carriage :	AT
Transport category (ADR) :	2
Special provisions for carriage - Packages (ADR) :	V11
Special provisions for carriage - Bulk (ADR) :	VC1, VC2, AP2
Hazard identification number (Kemler No.) :	40

14.2 Transport IMDG

UN-No:	3175
Proper Shipping Name:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol)
Hazard Class:	4.1
Packing Group:	II
Special provisions (IMDG) :	216, 274
Packing instructions (IMDG) :	P002
Special packing provisions (IMDG) :	PP9
IBC packing instructions (IMDG) :	IBC06
IBC special provisions (IMDG) :	B21
Tank instructions (IMDG) :	T3, BK2
Tank special provisions (IMDG) :	TP33
EmS-No. (Fire) :	F-A
EmS-No. (Spillage) :	S-I
Stowage category (IMDG) :	B
Properties and observations (IMDG) :	Mixtures of non-dangerous solids (such as soil, sand, production materials etc.) and flammable liquids.

14.3 Transport ICAO-TI / IATA

UN-No:	3175
Proper Shipping Name:	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S. (Isopropyl alcohol)
Hazard Class:	4.1
Packing Group:	II
PCA Excepted quantities (IATA) :	E2
PCA Limited quantities (IATA) :	Y441
PCA limited quantity max net quantity (IATA) :	5kg

PCA packing instructions (IATA) :	445
PCA max net quantity (IATA) :	15kg
CAO packing instructions (IATA) :	448
CAO max net quantity (IATA) :	50kg
Special provisions (IATA) :	A46
ERG code (IATA) :	3L

14.4 Other information

Inland waterway transport

Classification code (ADN) :	F1
Special provisions (ADN) :	216, 274, 601, 800
Limited quantities (ADN) :	1 kg
Excepted quantities (ADN) :	E2
Equipment required (ADN) :	PP, EX, A
Ventilation (ADN) :	VE01, VE03
Provisions for inspection of holds during carriage (ADN):	IN01, IN02
Number of blue cones/lights (ADN) :	1
Additional requirements/Remarks (ADN) :	VE03, IN01 and IN02 apply only when this substance is carried in bulk or without packaging

Rail transport

Classification code (RID) :	F1
Special provisions (RID) :	216, 274, 601
Limited quantities (RID) :	1kg
Excepted quantities (RID) :	E2
Packing instructions (RID) :	P002, IBC06, R001
Special packing provisions (RID) :	PP9
Mixed packing provisions (RID) :	MP11
Portable tank and bulk container instructions (RID) :	T3, BK1, BK2
Portable tank and bulk container special provisions (RID):	TP33
Transport category (RID) :	2
Special provisions for carriage – Packages (RID) :	W1
Special provisions for carriage – Bulk (RID) :	VC1, VC2, AP2
Colis express (express parcels) (RID) :	CE11
Hazard identification number (RID) :	40

14.5 Environmental hazards

None.

14.6 Special precautions for user

No data available.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not classified.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulations
No additional information available.
Classification according to Directive 67/548/EEC or 1999/45/EC
F; R11
Xi; R36
R67
US and Canada regulations
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Listed on SARA Section 313 (Specific toxic chemical listings)
WHMIS Classification Regulated

15.2 Chemical safety assessment
No data available.

SECTION 16: Other information

Further information
The information is based on our current knowledge however it does not represent a guarantee of product properties nor does it create any legal obligation. This "Safety Information" is provided as a service to our customers. The details presented are in accordance with our present knowledge and experiences.

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP); EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU US Regulation 29 CFR 1910.1200 (HazCom2012); WHMIS 2015; National Threshold Limit Values of the corresponding countries; Transport regulations according to ADR, RID, IMDG, IATA; AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

Data base:
https://echa.europa.eu
OSHA quick card, Hazard Communication Safety Data Sheets
https://cameochemicals.noaa.gov/
https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1200AppA
https://www.osha.gov/laws-regs/standardinterpretations/standardnumber/1910/1910.1200%2520-%2520Index/result
https://www.osha.gov/laws-regs/standardinterpretations/2021-04-23