

SAFETY DATA SHEET

Product identifier	DOWNWIND WINDSHIELD CLEANER
Other means of identification	
Product code	AV579
Recommended use	Glass Cleaner
Recommended restrictions	No other uses are advised.
Manufacturer/Importer/Supplier	Distributor information
Manufacturer	
Company name Address	SPA Aviation Products 11625 Custer Rd ste 110-348 Frisco, TX 75035 United States
Telephone	972-533-3658
Website	www.spaaviationproducts.com
Emergency phone number	EMERGENCY 24 Hrs. ChemTrec 800-424-9300
2. Hazard(s) identificatior	
Physical hazards	Flammable liquids Category 2
Health hazards	Sensitization, skin Category 1
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Signal word	Danger
Hazard statement	Highly flammable liquid and vapor. May cause an allergic skin reaction.
Precautionary statement Prevention	Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/eye protection/face protection.
Response	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Store in a well-ventilated place. Keep cool.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	2% of the mixture consists of component(s) of unknown acute inhalation toxicity. 2% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 2% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Isopropanol		67-63-0	1 - < 3
SODIUM DODECYLBENZENE SULFONATE		25155-30-0	< 1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures	
Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation. May cause an allergic skin reaction. Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.
5. Fire-fighting measures	
Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.
	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.
	Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Environmental precautions	Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage			
Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.		
Conditions for safe storage, including any incompatibilities	Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).		
8. Exposure controls/personal protection			

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Components	Ту	уре	Va	lue	
Isopropanol (CAS 67-63-0)	PE	EL	98	0 mg/m3	
			40	0 ppm	
US. ACGIH Threshold Lim	nit Values				
Components	Ту	уре	Va	lue	
Isopropanol (CAS 67-63-0)	ST	TEL	40	0 ppm	
	T۱	WA	20	0 ppm	
US. NIOSH: Pocket Guide	to Chemical Hazard	ds			
Components	Ту	уре	Va	lue	
Isopropanol (CAS 67-63-0)	ST	TEL	12	25 mg/m3	
			50	0 ppm	
	T۱	NA	98	0 mg/m3	
			40	0 ppm	
ological limit values ACGIH Biological Exposu Components	re Indices Value	Determinant	Specimen	Sampling Time	
ACGIH Biological Exposu		Determinant	Specimen	Sampling Time	
ACGIH Biological Exposu	Value	Determinant Acetone	Specimen Urine	Sampling Time	
ACGIH Biological Exposu Components	Value 40 mg/l	Acetone	•	Sampling Time *	
ACGIH Biological Exposu Components Isopropanol (CAS 67-63-0)	Value 40 mg/l ase see the source d Explosion-proof Ventilation rates exhaust ventilation exposure limits.	Acetone locument. general and local exh should be matched to on, or other engineer	Urine naust ventilation. (o conditions. If ap ing controls to ma re not been estab	* Good general ventilatio plicable, use process e intain airborne levels b lished, maintain airborr	enclosures, local pelow recommende
ACGIH Biological Exposu Components Isopropanol (CAS 67-63-0) * - For sampling details, ple propriate engineering ntrols	Value 40 mg/l ase see the source d Explosion-proof Ventilation rates exhaust ventilation exposure limits. acceptable level. es, such as personal	Acetone locument. general and local exh should be matched to on, or other engineer If exposure limits hav . Provide eyewash sta I protective equipmo	Urine Daust ventilation. (o conditions. If ap ing controls to ma re not been estab ation and safety s ent	* Good general ventilatio plicable, use process e intain airborne levels b lished, maintain airborn hower.	enclosures, local below recommende he levels to an
ACGIH Biological Exposu Components Isopropanol (CAS 67-63-0) * - For sampling details, ple propriate engineering htrols	Value 40 mg/l ase see the source d Explosion-proof Ventilation rates exhaust ventilation exposure limits. acceptable level. es, such as personal	Acetone locument. general and local exh should be matched to on, or other engineer If exposure limits hav . Provide eyewash sta I protective equipmo	Urine Daust ventilation. (o conditions. If ap ing controls to ma re not been estab ation and safety s ent	* Good general ventilatio plicable, use process e intain airborne levels b lished, maintain airborr	enclosures, local below recommende he levels to an
ACGIH Biological Exposu Components Isopropanol (CAS 67-63-0) * - For sampling details, ple propriate engineering ntrols	Value 40 mg/l ase see the source d Explosion-proof Ventilation rates exhaust ventilation exposure limits. acceptable level. es, such as personal Face shield is re	Acetone locument. general and local exh should be matched to on, or other engineer If exposure limits hav . Provide eyewash sta I protective equipme commended. Wear s	Urine Daust ventilation. (o conditions. If ap ing controls to ma re not been estab ation and safety s ent afety glasses with	* Good general ventilatio plicable, use process e intain airborne levels b lished, maintain airborn hower.	enclosures, local below recommende he levels to an
ACGIH Biological Exposu Components Isopropanol (CAS 67-63-0) * - For sampling details, ple propriate engineering ntrols	Value 40 mg/l ase see the source d Explosion-proof Ventilation rates exhaust ventilation exposure limits. acceptable level. es, such as personal Face shield is re	Acetone locument. general and local exh should be matched to on, or other engineer If exposure limits hav . Provide eyewash sta I protective equipmo	Urine Daust ventilation. (o conditions. If ap ing controls to ma re not been estab ation and safety s ent afety glasses with	* Good general ventilatio plicable, use process e intain airborne levels b lished, maintain airborn hower.	enclosures, local below recommende he levels to an
ACGIH Biological Exposu Components Isopropanol (CAS 67-63-0) * - For sampling details, ple propriate engineering ntrols	Value 40 mg/l ase see the source d Explosion-proof Ventilation rates exhaust ventilation exposure limits. acceptable level. es, such as personal Face shield is re Wear appropriate	Acetone locument. general and local exh should be matched to on, or other engineer If exposure limits hav . Provide eyewash sta I protective equipme commended. Wear s e chemical resistant g	Urine naust ventilation. (o conditions. If ap ing controls to ma re not been estab ation and safety s ent afety glasses with gloves.	* Good general ventilatio plicable, use process e intain airborne levels b lished, maintain airborn hower.	enclosures, local below recommende te levels to an es).
ACGIH Biological Exposu Components Isopropanol (CAS 67-63-0) * - For sampling details, ple propriate engineering ntrols lividual protection measure Eye/face protection Skin protection Hand protection	Value 40 mg/l ase see the source d Explosion-proof Ventilation rates exhaust ventilation exposure limits. acceptable level. es, such as personal Face shield is re Wear appropriate Wear appropriate If engineering co limits (where app	Acetone locument. general and local exh should be matched to on, or other engineer If exposure limits hav . Provide eyewash sta I protective equipme commended. Wear s e chemical resistant of e chemical resistant of ontrols do not maintain	Urine Daust ventilation. (o conditions. If ap ing controls to ma re not been estab ation and safety s ent afety glasses with gloves. clothing. Use of an n airborne concer eptable level (in co	* Good general ventilatio pplicable, use process e intain airborne levels b lished, maintain airborn hower. n side shields (or goggle n impervious apron is re ntrations below recommo puntries where exposu	enclosures, local below recommend he levels to an es). ecommended. hended exposure



General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Form	Liquid.
Color	Blue.
Odor	Mild Chemical.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or exp	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.00001 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Density	0.83 g/cm3 estimated
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Percent volatile	99.5 % estimated
Specific gravity	0.83 estimated
10. Stability and reactivity	/

y	
Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.

Strong oxidizing agents. No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure				
Inhalation	Prolonged inhalation may be harmful.			
Skin contact	May cause an allergic skin reaction.			
Eye contact	Direct contact with eyes may cause temporary irritation.			
Ingestion	Expected to be a low ingestion hazard.			
Symptoms related to the physical, chemical and toxicological characteristics	May cause an allergic skin reaction. Dermatitis. Rash.			

Information on toxicological effects

Acute toxicity	Not known.	
Components	Species	Test Results
Isopropanol (CAS 67-63-0)		
Acute		
Dermal		
LD50	Rabbit	12800 mg/kg
Skin corrosion/irritation	Prolonged skin contact mag	y cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes ma	ay cause temporary irritation.
Respiratory or skin sensitization	n	
Respiratory sensitization	Not a respiratory sensitizer	
Skin sensitization	May cause an allergic skin	reaction.
Germ cell mutagenicity	No data available to indicat mutagenic or genotoxic.	e product or any components present at greater than 0.1% are
Carcinogenicity	Not classifiable as to carcir	ogenicity to humans.
IARC Monographs. Overall	Evaluation of Carcinogenic	ity
Not listed.		
OSHA Specifically Regulate	ed Substances (29 CFR 1910).1001-1052)
Not regulated. US. National Toxicology Pro	ogram (NTP) Report on Car	anaponia
Not listed.		Sinogens
Reproductive toxicity	This product is not expecte	d to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	Prolonged inhalation may b	e harmful.
12. Ecological information	n	
Ecotoxicity		d as environmentally hazardous. However, this does not exclude the uent spills can have a harmful or damaging effect on the environment.

	1 2	5 1 1	5 5
Components		Species	Test Results
Isopropanol (CAS 67-	63-0)		
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	> 1400 mg/l, 96 hours
SODIUM DODECYLB	ENZENE SULFON	ATE (CAS 25155-30-0)	
Aquatic			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	3.26 - 14.51 mg/l, 48 hours

Components	Species		Test Results		
Fish	LC50 Rainbow trout (Oncorhynchu	,donaldson trout ıs mykiss)	3.2 - 5.6 mg/l, 96 hours		
Persistence and degradability	nce and degradability No data is available on the degradability of any ingredients in the mixture.				
Bioaccumulative potential					
Partition coefficient n-octar Isopropanol SODIUM DODECYLBENZEN		0.05 0.45			
Mobility in soil	No data available.				
Other adverse effects			epletion, photochemical ozone creation al) are expected from this component.		
13. Disposal consideratio	ns				
Disposal instructions			licensed waste disposal site. Dispose of ational/international regulations.		
Local disposal regulations	Dispose in accordance with a	Il applicable regulations.			
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.				
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).				
Contaminated packaging			follow label warnings even after container is oved waste handling site for recycling or		

14. Transport information

The following transportation information is provided based on the manufacturer's interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking, and labeling prior to offering for transport. **DOT**

501		
UN number		UN1219
UN proper shippir	ig name	Isopropanol or Isopropyl alcohol, solution (Isopropanol RQ = 5000 LBS)
Transport hazard	class(es)	
Class		3
Subsidiary ris	k	-
Label(s)		3
Packing group		II
Special precaution	ns for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	5	IB2, T4, TP1
Packaging except	ions	4b, 150
Packaging non bu	lk	202
Packaging bulk		242
ΙΑΤΑ		
UN number		UN1219
UN proper shippir	ig name	Isopropanol solution (Isopropanol)
Transport hazard	class(es)	
Class		3
Subsidiary ris	k	-
Packing group		11
Environmental has	zards	No.
ERG Code		3L
	ns for user	Read safety instructions, SDS and emergency procedures before handling.
Other information		
Passenger an	d cargo	Allowed with restrictions.
aircraft		
Cargo aircraft	only	Allowed with restrictions.
IMDG		
UN number		UN1219
UN proper shippir		ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION (Isopropanol)
Transport hazard	class(es)	
Class		3

Subsidiary risk Packing group Environmental hazards	- II
Marine pollutant	No.
EmS	F-E, S-D
	Read safety instructions, SDS and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not established.
DOT	
FLAMMABLE LIQUID 3	
IATA; IMDG	

15. Regu	ilatory	inform	ation
15. Keyu	Πάιθιγ		Ialion

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US federal regulations	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.		
Toxic Substances Control A	ct (TSCA)		
TSCA Section 12(b) Exp	oort Notification (40 CFR	707, Subpt. D)	
Not regulated.			
CERCLA Hazardous Substa	nce List (40 CFR 302.4)		
Isopropanol (CAS 67-63- SODIUM DODECYLBEN (CAS 25155-30-0)		Listed. Listed.	
SARA 304 Emergency relea	se notification		
Not regulated. OSHA Specifically Regulate Not regulated.	d Substances (29 CFR 19	910.1001-1052)	
Superfund Amendments and Re	authorization Act of 1986	6 (SARA)	
SARA 302 Extremely hazard			
Not listed.			
SARA 311/312 Hazardous chemical	Yes		
Classified hazard categories	Flammable (gases, aero Respiratory or skin sens		
SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.
Isopropanol		67-63-0	1 - < 3

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated.

(SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Isopropanol (CAS 67-63-0)

Low priority

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Isopropanol (CAS 67-63-0)

International Inventories

Country(s) or region	Inventory name On	inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date	02-06-2020
Version #	01
Disclaimer	SPA Aviation Pro product, or the pro is the user's respo

SPA Aviation Products cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.