

Material Safety Data Sheet

Smartguard Anti-soiling & Easy-to-clean Coating For Glass

Creation Date: 2020-03-09

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Section 1 - Chemical Product and Company Identification

MSDS Name: Smartguard Anti-soiling & Easy-to-clean Coating For Glass
Catalogue Numbers: n/a
Synonyms: n/a
Company Identification: Rm9B, Jialitai Building, Yanshan road, Nanshan Dist., Shenzhen, China

For information, call: 0086-755-26890033
Emergency Number: +8613823711474

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
67-63-0	isopropyl alcohol	89.92%	200-661-7
-	Ebigut®	10.08%	-

Section 3 - Hazards Identification

Appearance: clear, colourless liquid.

Warning! Flammable liquid and vapour. May be absorbed through intact skin. May cause severe eye and skin irritation with possible burns. May cause severe respiratory and digestive tract irritation with possible burns. May cause central nervous system depression. May form explosive peroxides.

Target Organs: Central nervous system.

Potential Health Effects

Eye: Contact with eyes may cause severe irritation, and possible eye burns. Contact may cause ulceration of the conjunctiva and cornea. Eye damage may be delayed. May cause chemical conjunctivitis and corneal damage.

Skin: Prolonged and/or repeated contact may cause de-fatting of the skin and dermatitis. May be absorbed through the skin. May cause severe irritation and possible burns. May cause irritation and dermatitis. May cause cyanosis of the extremities.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Ingestion of large amounts may cause CNS depression.

Inhalation: May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. May cause narcotic effects in high concentration. Aspiration may lead to pulmonary edema. Vapours may cause dizziness or suffocation. May cause burning sensation in the chest.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

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Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapours may form an explosive mixture with air. Vapours can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapour. May form explosive peroxides. Vapours may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. Water may be ineffective. Do NOT use straight streams of water.

Flash Point: 13°C [54°F] closed cup

Autoignition Temperature: 399°C [750°F]

Flammable limits in air % volume: lel: 2.5 uel: 10.5

NFPA Rating: (estimated) Health: ; Flammability: ; Instability:

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Wash area with soap and water. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapour suppressing foam may be used to reduce vapours.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapour), and can be dangerous. Keep away from heat, sparks and flame. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Flammables-area. Store in a cool, dry area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Isopropyl alcohol	200 ppm TWA; 400 ppm STEL	400 ppm TWA; 980 mg/m ³ TWA 2000 ppm IDLH	400 ppm TWA; 980 mg/m ³ TWA
Ebigut ^l	10mg/m ³ Ceiling	none listed	none listed

OSHA Vacated PELs: isopropyl alcohol: 400 ppm TWA; 980 mg/m³ TWA

Ebigut[®]: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN

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149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Appearance:	colourless liquid
Odour:	alcohol-like
pH:	approx. 2-3
Vapour Pressure:	4.4 KpA at 20°C
Vapour Density:	0.8048 g/cm ³
Evaporation Rate:	Not available.
Viscosity:	approx. 2mPas at 20°C
Boiling Point:	> 80°C
Freezing/Melting Point:	Not available.
Decomposition Temperature:	Not available.
Solubility:	miscible in benzene, chloroform, ethanol, ether, glycerine soluble in acetone, water insoluble in salt solutions
Specific Gravity/Density:	Not available.
Molecular Formula:	Mixture
Molecular Weight:	Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. This material may be sensitive to peroxide formation.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, oxides of potassium.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 67-63-0: NT8050000

LD50/LC50:

CAS# 67-63-0:

Draize test, rabbit, eye: 100 mg Severe; 10 mg Moderate; 100 mg/24H Moderate; skin: 500 mg Mild;

Inhalation, mouse: LC50 = 53000 mg/m³;

Inhalation, rat: LC50 = 16000 ppm/8H; LC50 = 72600 mg/m³;

Oral, mouse: LD50 = 3600 mg/kg; LD50 = 3600 mg/kg;

Oral, rabbit: LD50 = 6410 mg/kg;

Oral, rat: LD50 = 5045 mg/kg; LD50 = 5000 mg/kg;

Skin, rabbit: LD50 = 12800

Carcinogenicity:

CAS# 67-63-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: No information found

Reproductive Effects: No information found

Mutagenicity: Cas# 67-63-0:Cytogenetic analysis(Inhalation, rat) =1030 ug/m³/16W(Intermittent)

Neurotoxicity: No information found

Other Studies: No information available.

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Section 12 - Ecological Information

Ecotoxicity: No data available. Cas# 67-63-0:LC50 (96Hr.) Fathead Minnow = 94900-10400 mg/L; Flow-through condition LC50 (96 Hr.) Fathead Minnow = 61200-65500 mg/L; Flow-through condition.

Environmental: Cas# 67-63-0: TERRESTRIAL FATE: When spilled on soil, isopropyl alcohol will both evaporate quickly and leach into the ground due to its high vapour pressure and low adsorption to soil. Degradation in soil and groundwater has not been determined. If soil degradation is not rapid, it is apt to leach into the groundwater. AQUATIC FATE: When released into water, isopropyl alcohol will volatilize (estimated half-life approximately 5.4 days) and may biodegrade. Although it is readily degradable in a number of laboratory tests, no data on its degradability in natural waters.

Physical: Cas# 67-63-0: ATMOSPHERIC FATE: When released into the atmosphere, isopropanol will photodegrade with an estimated half-life ranging from one to several days. Due to its solubility in water, rainout may be significant.

Other: No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	GGVS/ADR/RID (Road and Railway)	MDG (Marine Transport)	IATA (Air Transport)
Shipping Name:	flammable solution (isopropyl alcohol)	IPA containing solution	isopropyl solution
Classification code:	3	3.3	3
UN Number:	1993	1993	1993
Packing Group:	III (hazard label)	II (hazard label)	II (hazard label)

Section 15 - Regulatory Information

US FEDERAL

TSCA CAS# 67-63-0 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 67-63-0: Effective 12/15/86, Sunset 12/15/96

Chemical Test Rules

CAS# 67-63-0: 40 CFR 799.2325

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have a hazardous substances and corresponding RQs.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 67-63-0: immediate, delayed, fire.

Section 313

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This material contains Isopropyl alcohol (CAS# 67-63-0, 89.92%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 67-63-0 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

F

Risk Phrases:

R11 highly flammable

R36 irritating to eyes

R67 vapours may cause drowsiness and dizziness

Safety Phrases:

S7 keep container tightly closed

S16 keep away from sources of ignition - no smoking.

S24/25 avoid any inhalation, contact with skin and eyes. Wear suitable protective clothing and gloves

S26 in case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK (Water Danger/Protection)

CAS# 67-63-0: 1

Canada - DSL/NDSL

CAS# 67-63-0 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 67-63-0 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the manufacturer be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the manufacturer has been advised of the possibility of such damages.