



Material Safety Data Sheet

EC-211

1. Product and company identification

Product Name: EC-211
Product Use: Hydrophobic Coating for Glass Surfaces
Manufacturer/Supplier: Nano Faraz Sepahan Co.
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Science & technology Town, Isfahan
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Date of Preparation: 05/19/2019

2. Hazards identification

EMERGENCY OVERVIEW

CAUTION

FLAMMABLE. IRRITATING TO EYES. IRRITATING TO SKIN.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: Irritating to eyes - potentially severe.

Skin: No skin irritation

Most important symptoms and effects, both acute and delayed irritant effects, respiratory paralysis, Dizziness, inebriation, euphoria, Nausea, Vomiting, narcosis

Potential Environmental Effects: Do not let product enter drains.

Risk of explosion.



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3. Composition/information on ingredients

ingredient	CAS number	Proportion.
Isopropanol	67-63-0	40-70%
Tetramethoxysilane	681-84-5	3-10%
Alkoxy silanes & siloxanes	n/a	5-20%
Organotin compound	64-19-7	0.3-5%

4. First-aid measures

Eye Contact: After eye contact rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

Skin Contact: In case of skin contact take off immediately all contaminated clothing. Rinse skin with water/ shower.

Inhalation: If breathed in, move person into fresh air.

Ingestion: immediately make victim drink water (two glasses at most). Consult a physician.

5. Fire-fighting measures

Flammability: Flammable

Extinguishing media: Use carbon dioxide, dry powder, foam or water fog, mist or spray. Do not use high pressure water jet as this may spread burning material.

Special hazards arising from the substance or mixture:

Unusual Fire & Explosion Hazards

Fire causes formation of toxic gases.

Specific hazards

The product is flammable, and heating may generate vapors which may form explosive vapor/air mixtures.



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Advice for firefighters

Protective equipment for fire-fighters

Wear self-contained breathing apparatus and full protective clothing. Keep all unnecessary people away. Fire water run-off must not be allowed to contaminate ground or enter drains, sewers or water courses. Provide bunding against fire water run-off.

6. Accidental release measures

Personal Precautions: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, and consult an expert.

Environmental Precautions: Do not let product enter drains. Risk of explosion.

Methods for Containment and Clean-Up: Cover drains. Collect, bind, and pump off spills. Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.

7. Handling and storage

Handling: Observe label precautions. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge. Change contaminated clothing. Wash hands after working with substance. Always comply with health and safety regulations.

Storage: Store in original container. Observe label precautions. Store in a cool, well-ventilated area away from incompatible materials and ignition sources.

Keep away from oxidizing agents, strong alkaline and acids.



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No smoking. Containers which have been opened must be carefully resealed and kept upright to prevent leakage.

Storage temperature: 5- 35°C

8. Exposure controls/personal protection

Personal Protective Equipment:

Eye/Face Protection: Wear approved eye protection (splash-proof chemical safety goggles) and face protection (face shield). Do NOT wear contact lenses when using this product.

Hand Protection: Wear suitable gloves - nitrile, rubber.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

9. Physical and chemical properties

Form	liquid
Appearance:	Clear
Color:	Colorless
Odor:	Alcohol-like
Density:	0.80 gr/cm ³
Flash Point:	12 °C

10. Stability and reactivity



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Stability: The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions:

Hazardous Polymerisation

Will not polymerise.

Conditions to avoid:

Avoid heat, flames and other sources of ignition.

Incompatible materials:

Materials To Avoid

Strong oxidising substances. Strong acids.

Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

11. Toxicological information

Acute oral toxicity: Symptoms: Nausea, Vomiting

Acute inhalation toxicity: Symptoms: Possible damages: mucosal

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Eye irritation: Causes serious eye irritation.

12. Ecological information

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.



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13. Disposal considerations

Disposal Instructions: This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

14. Transport information

TDG Classification:

UN 1219; Flammable liquids; Class 3; PG II

15. Regulatory information

EU regulations Major Accident Hazard Legislation	SEVESO III FLAMMABLE LIQUIDS P5c Quantity 1: 5.000 t Quantity 2: 50.000 t
Occupational restrictions	Take note of Dir 94/33/EC on the protection of young people at work.
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	not regulated



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Substances of very high concern (SVHC) This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of ≥ 0.1 % (w/w).

Labeling

Hazard pictograms



16. Other information

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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