

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

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Product Name: IRUV CUT COAT HARDNER
Product Description: Liquid to set up glaze that becomes thermal insulating glass coat that also reduces UV radiation
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SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. NO.</u>	<u>PERCENT</u>
Hexane,1,6-diisocyanato-,homopolymer	28182-81-2	75~85
Glutaric acid dimethyl ester	1119-40-0	1~25

This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372:

SECTION 3: HAZARDS IDENTIFICATION

Applicable categories: Inflammable
Danger: Non-inflammable liquid

SECTION 4: FIRST AID MEASURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed:

Eye Contact: Without rubbing the eyes, flush with large quantities of water for 15 minutes, including the inside of the eyelids; promptly seek medical attention.

Skin Contact: Wash with soap and flush with large amounts of water. Obtain medical attention. If the product permeates clothing, wash contaminated clothing and clean shoes before reuse.

If Swallowed: If swallowed, call a physician immediately. Provide large amounts of water to drink. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature	370°C
Flash point	100°C
Flammable Limits – LEL	No data available
Flammable Limits – UEL	No data available

5.2 EXTINGUISHING MEDIA AND MEASURES

With small fires, use water, dry chemicals, carbon dioxide and/or dry sand. For larger fires, use foam or water. Using sprayed water may increase the danger by spreading the fire.

If there is a fire in the vicinity of the product, promptly move the containers to a safe location. If the fire spreads, extinguish with large amounts of water.

Because of the danger of polyisocyanate vapors being released during a fire, always wear self-contained breathing apparatus. When engaged in fire fighting, always wear protective clothing.

After extinguishing a fire, professionals should engage in clean up activities to neutralize the isocyanate released by the fire.

Extinguishing media: carbon dioxide, dry chemicals and large amounts of sprayed water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Observe precautions from other sections. Evacuate unprotected and untrained personnel from hazard area, including the area downwind from the release. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Prevent others from entering the vicinity of the release by roping off the area appropriately. Remove anything in the area that might be an ignition source. Clean up personnel should absolutely wear protective clothing.

If the amount released is small, diluting with large amounts of water and washing away may be appropriate, but only where the water can be recovered. If the amount released is a greater, stop the release with sand or rags and then recover the released material.

Caution should be taken to recover all that is possible. Any remaining amounts should be neutralized and then rinsed with large amounts of water. Care should be exercised because of the risk of environmental contamination.

Examples of neutralizing media: water, sodium carbonate, liquid solvent, in the following relative proportions: 90~95: 5~10: 0.2~0.5.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Use in a well-ventilated area.

Keep containers appropriately sealed.

Wear appropriate protective clothing to keep away from skin, mucous membranes and the eyes.

Minimize exposure to released vapors or concentrations encountered while working with the material.

Use care to manage static electricity; use appropriate conductive materials in clothes and shoes.

After working with material, thoroughly wash hands and eyes and change clothes.

7.2 STORAGE

Seal after use and avoid locations which might freeze or that have directly sunlight or that might be close to a source of heat. Keep container in well-ventilated area. All electrical equipment near the storage area should have spark and ignition control protective measures.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Provide airtight containers and local exhaust ventilation for all open containers. Provide and clearly mark near area of use a safety shower and facilities for washing hands and eyes.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 8.2.1. Eye/Face Protection. Avoid eye contact with vapors, mists, or spray. Avoid eye contact. The following eye protection(s) are recommended: Indirect Vented Goggles.
- 8.2.2. Skin Protection. Avoid skin contact. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Rubber gloves, boots and apron are

recommended. Gloves made from the following material(s) are recommended: butyl rubber.

- 8.2.3. Respiratory Protection. Avoid breathing of vapors, mists or spray. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Fullface supplied-air respirator.
- 8.2.4. Prevention of Swallowing. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form:	liquid
Odor, Color, Grade:	weak odor, transparent
Boiling point:	158°C
Vapor density:	0.277kPa (20°C)
Specific gravity (20°C):	0.95-1.05
Flash point:	100°C
Autoignition point:	370°C
Flammable limits:	No data
Combustibility:	Volatile, inflammable liquid
Explosiveness:	If stored in sealed tank or bottle, exposure to heat will give rise to risk of explosion
Reactivity:	Reacts strongly to strong oxidizing agents
Other:	None

SECTION 10: STABILITY AND REACTIVITY

Stability:	
Materials to avoid:	Strong oxidizing agents

SECTION 11: TOXICOLOGICAL INFORMATION

<u>Ingredient</u>	<u>CAS No.</u>	<u>LD50</u>	<u>Other</u>
Hexane,1,6-diisocyanato-,homopolymer	28182-81-2	5000mg/kg	

No additional information is presently available about the risks of the mixture of these ingredients in the product.

SECTION 12: ECOLOGICAL INFORMATION

Care should be taken to avoid release into the environment because of concerns of damage to the environment.

Take care to prevent release of the product or wash water onto the ground, into the water supply or into the atmosphere.

SECTION 13: DISPOSAL CONSIDERTIONS

Waste disposal method. Disposal should be entrusted to an authorized industrial waste handler. Do not permit rinse water to be released into the water supply.

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14: TRANSPORT INFORMATION

Avoid rough handling that might cause the containers to break.

United Nations Number: There is not it for non-dangerous materials

United Nations Class: There is not it for non-dangerous materials

SECTION 15: REGULATORY INFORMATION

Contact Sketch for more information.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. sketch MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the sketch product is fit for a particular purpose and suitable for user's method of use or application. It is essential that the user evaluate the sketch product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.