



## Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Vikuiti™ Durable Enhanced Specular Reflector Film (DESR)  
**MANUFACTURER:** 3M  
**DIVISION:** Optical Systems Division  
**ADDRESS:** 3M Center  
 St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 02/09/2006  
**Supersedes Date:** 12/27/2004

**Document Group:** 19-7429-4

**Product Use:**  
 Specific Use: OPTICAL ENHANCEMENT FILM

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
POLYESTER FILM	None	60 - 90
CURED ACRYLIC RESIN	None	10 - 40

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Odor, Color, Grade:** Clear, transparent film.

**General Physical Form:** Solid

**Immediate health, physical, and environmental hazards:** This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards.

## 3.2 POTENTIAL HEALTH EFFECTS

### Eye Contact:

No health effects are expected.

### Skin Contact:

No health effects are expected.

### Inhalation:

No health effects are expected.

### Ingestion:

No health effects are expected.

## SECTION 4: FIRST AID MEASURES

### 4.1 FIRST AID PROCEDURES

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

**Eye Contact:** No need for first aid is anticipated.

**Skin Contact:** No need for first aid is anticipated.

**Inhalation:** No need for first aid is anticipated.

**If Swallowed:** No need for first aid is anticipated.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperature	<i>No Data Available</i>
Flash Point	<i>Not Applicable</i>
Flammable Limits - LEL	<i>Not Applicable</i>
Flammable Limits - UEL	<i>Not Applicable</i>

### 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** No unusual fire or explosion hazards are anticipated. Non-flammable: ordinary combustible material.

**Note:** See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** Not applicable.

## SECTION 7: HANDLING AND STORAGE

### 7.1 HANDLING

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

### 7.2 STORAGE

Store under normal warehouse conditions.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust when product is heated.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

#### 8.2.1 Eye/Face Protection

Avoid eye contact.

#### 8.2.2 Skin Protection

Gloves not normally required.

#### 8.2.3 Respiratory Protection

Not applicable.

#### 8.2.4 Prevention of Swallowing

Not applicable.

### 8.3 EXPOSURE GUIDELINES

None Established

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Odor, Color, Grade:</b>	Clear, transparent film.
<b>General Physical Form:</b>	Solid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	<i>Not Applicable</i>
<b>Flammable Limits - LEL</b>	<i>Not Applicable</i>
<b>Flammable Limits - UEL</b>	<i>Not Applicable</i>
<b>Boiling point</b>	<i>Not Applicable</i>
<b>Density</b>	<i>No Data Available</i>
<b>Vapor Density</b>	<i>Not Applicable</i>
<b>Vapor Pressure</b>	<i>Not Applicable</i>
<b>Specific Gravity</b>	<i>No Data Available</i>
<b>pH</b>	<i>Not Applicable</i>

Melting point  
Solubility In Water

No Data Available  
Not Applicable

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Sparks and/or flames

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Oxidation, heat or reaction
Carbon dioxide	Oxidation, heat or reaction
Hydrogen Chloride	Oxidation, heat or reaction

**Hazardous Decomposition:** Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

## SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

## SECTION 12: ECOLOGICAL INFORMATION

### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Method:** Reclaim if feasible. If product can't be reclaimed, dispose of waste product in a sanitary landfill. Alternatively, incinerate the waste product in an industrial, commercial, or municipal incinerator.

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

## SECTION 14: TRANSPORT INFORMATION

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

## SECTION 15: REGULATORY INFORMATION

### US FEDERAL REGULATIONS

#### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

### CHEMICAL INVENTORIES

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

### INTERNATIONAL REGULATIONS

This product is RoHS Directive Compliant. 'RoHS Directive Compliant' means that the product or part does not contain any of the following substances in excess of the following maximum concentration values: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. This information represents 3M's knowledge and belief based on product test data and information provided by third party suppliers to 3M.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

## SECTION 16: OTHER INFORMATION

### NFPA Hazard Classification

Health: 0 Flammability: 1 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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