



Durel Division

Durel Division / 2225 W. Chandler Blvd. / Chandler, AZ 85224-6155 / 480.917.6000 / Fax: 480.917.6049

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: ELS0xx (x = integer)

CHEMICAL FAMILY: Electroluminescent Substrate

HMIS RATING: H 1 F 0 R 0

USE OF MATERIAL: Electroluminescent Lamps

EMERGENCY PHONE: 860-774-9605 (Monday – Friday 8 a.m. – 5 p.m. EST)

CHEMTREC: 800-424-9300 (U.S. & Canada) (24 Hours)
703-527-3887 (International – Call Collect) (24 Hours)

2. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS No.</u>	<u>EINECS /ELINCS</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>China OEL</u>	<u>EU Classification</u>
Polyester Film	25038-59-9	NE	55-75	NE	NE	NE	NC
Resins	Proprietary	--	10-20	NE	NE	NE	NC
Zinc Sulfide, Copper Chloride-Doped	68611-70-1	271-904-2	>90	5 mg/m ³ (Respirable PNOR) 15 mg/m ³ (Total PNOR)	3 mg/m ³ (Respirable PNOS) 10 mg/m ³ (Inhalable PNOS)	NE	NC
Titanium Dioxide	13463-67-7	236-675-5	<5	15 mg/m ³ (total)	10 mg/m ³	8 mg/m ³	Not Classified Under 67/548/EC
Pigment	Proprietary	--	0-2	NE	NE	NE	NC
Carbon	1333-86-4	215-609-9	0-2	3.5 mg/m ³	3.5 mg/m ³	4 mg/m ³	NC

The material contains no other hazardous ingredients as defined in OSHA's Hazard Communication Standard 29 CFR 1910.1200 or EU directive 1999/45/EC, and do not present a health or environmental hazard according to directive 67/548/EC.

3. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE MATERIAL: NE

LABELING REQUIREMENTS: NE

EFFECTS OF OVEREXPOSURE: NE

INHALATION: Breathing high concentrations of dust generated from sanding may produce irritation, labored breathing, and coughing.

EYE CONTACT: Mechanical irritation.

SKIN CONTACT: Repeated or prolonged exposure may cause irritation.

INGESTION: Not an anticipated route of exposure.

4. FIRST-AID MEASURES

INHALATION:	Remove to fresh air. Obtain medical attention if symptoms persist.
EYE CONTACT:	Flush eyes with water to remove any dust. Obtain medical attention if symptoms persist.
SKIN CONTACT:	Wash area with soap and water if irritation occurs. Obtain medical attention if symptoms persist.
INGESTION:	Not an anticipated route of exposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT:	NE °C (°F)	Flammable Limits:	LEL	<u>NA</u>	UEL	<u>NA</u>
AUTOIGNITION TEMPERATURE:	NE °C (°F)					
EXTINGUISHING MEDIA:	<u> X </u> Water Spray	<u> X </u> Foam	<u> </u> CO ₂			
	<u> X </u> Dry Chemical	<u> </u> Other –				
SPECIAL FIRE FIGHTING PROCEDURES:	Firefighters should be equipped with self-contained breathing apparatus and turnout gear. Film will burn.					
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None known.					

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS:	Avoid contact with skin and eyes.
ENVIRONMENTAL PRECAUTIONS:	None.
CLEANING METHODS:	Sweep or vacuum any dust generated.

7. HANDLING AND STORAGE

HANDLING:	No special handling procedures.
STORAGE:	Store at room temperature.

8. ENGINEERING CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:	None needed under normal conditions.
<u>VENTILATION</u>	
LOCAL:	Recommended for all industrial operations.
GENERAL:	Recommended for all industrial operations.
<u>PERSONAL PROTECTION</u>	
HAND:	As needed to prevent gross contact.
EYE:	NA
SKIN:	As needed to prevent gross contact.
OTHER:	NA

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Coated film
ODOR:	Slight Solvent-Like
PHYSICAL STATE:	Solid
BOILING POINT:	NE
MELTING POINT:	~260°C (~500°F)
FREEZING POINT:	NA °C (°F)
FLASH POINT:	NE °C (°F)
WATER SOLUBILITY:	Insoluble
VAPOR DENSITY:	NA
VAPOR PRESSURE:	NA
SPECIFIC GRAVITY:	NE (Water = 1)
PARTITION COEFFICIENT:	NA
EVAPORATION RATE:	NA
RELATIVE DENSITY:	NA
VISCOSITY:	NA
AUTO-IGNITION TEMPERATURE:	NA
DECOMPOSITION TEMPERATURE:	NA
PH:	NA
FLAMMABILITY:	NA

10. STABILITY AND REACTIVITY

STABLE	<input checked="" type="checkbox"/>	UNSTABLE	<input type="checkbox"/>
CONDITIONS TO AVOID:	Not reactive.		
MATERIALS TO AVOID:	Strong acids and bases may hydrolyze the film.		
HAZARDOUS POLYMERIZATION:	<input type="checkbox"/> May Occur	<input checked="" type="checkbox"/>	Does Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:	Zinc oxide, oxides of sulfur, copper, carbon oxides and hydrocarbon oxidation products including organic acids, aldehydes and alcohols..		

11. TOXICOLOGICAL INFORMATION

CARCINOGENIC STATUS: NA

12. ECOLOGICAL INFORMATION

ECOTOXICITY: NA

13. DISPOSAL CONSIDERATION

PHYSICAL/CHEMICAL PROPERTIES AFFECTING DISPOSAL: None

ENVIRONMENTAL TOXICITY DATA: NA

WASTE DISPOSAL METHOD: Dispose of in accordance with applicable federal, state, provincial, and local laws and regulations.

14. TRANSPORT INFORMATION

UN NUMBER: Not Regulated

UN PROPER SHIPPING NAME: Not Regulated

HAZARD CLASS (ES): Not Regulated

PACKING GROUP: Not Regulated

ENVIRONMENTAL HAZARDS: NE

15. REGULATORY INFORMATION

INTERNATIONAL REGULATIONS:

Canadian (DSL/NDSL):	LISTED
Australian (ACIS):	LISTED
Korea (KECI):	LISTED
Japan (ENCS, MITI):	LISTED
China (SEPA)	LISTED
EU Directive 2002/95/EC (RoHS):	Does not contain any intentionally added substances mentioned by the RoHS directive.

European: Symbol	Not classified according to directive 67/548/EEC (dangerous substances) and 1999/45/EC (dangerous preparations).
R-Phase(s):	NA
S-Phase(s):	NA

TSCA (<i>Toxic Substances Control Act</i>):	All materials are listed or exempt from TSCA listing.
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CERCLA (<i>Comprehensive Emergency Response, Compensation, and Liability Act</i>):	NA
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SARA TITLE III (<i>Superfund Amendments and Reauthorization Act</i>):	NA
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311/312 HAZARD CATEGORIES:	Immediate (Acute) Health Hazard
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This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

<u>TRI CHEMICAL CATEGORY</u>	<u>CHEMICAL NAME</u>	<u>PERCENT BY WEIGHT</u>
N982	Zinc Compound	10-20

16. OTHER INFORMATION

NA = Not Applicable
NE = Not Established
NC = Not Classified

FILE: 99234-Rogers ELSOxx-08152008.doc

PREPARED BY: Greg Sullivan, CIH

Date Prepared: 5/23/2008

REVISION ITEMS & DATE:

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