Material Safety Data Sheet

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

MANUFACTURER / SUPPLIER

General Electric Company
One Plastics Avenue
Pittsfield, MA 01201

GE Plastics Canada, Ltd.
2300 Meadowvale Blvd.
Mississauga, ONT L5N 5P9

EMERGENCY TELEPHONE

(800) 447-4545 (24 hour)
(812) 831-7444 (24 hour)

Medical
Other

(800) 447-4545 (24 hour)
(812) 831-7444 (24 hour)

NON-EMERGENCY TELEPHONE

(800) 845-0600

(800) 845-0600

PRODUCT IDENTIFIER: ULTEM
PRODUCT DESCRIPTION: Polyetherimide (CAS# 61128-46-9).
PRODUCT USE: May be used to produce molded or extruded articles intended for use in food or potable water contact, drug packaging, or medical device applications.

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product consists primarily of high molecular weight polymers which are not expected to be hazardous.

Additional compositional data are provided in the REGULATORY INFORMATION section for WHMIS, SARA 313, California Proposition 65, and various state right-to-know laws.

CAS NUMBER / CHEMICAL NAME	OSHA	UNITS	ACGIH	UNITS
13463-67-7 titanium dioxide (Ti O2)	10.0	mg/m3 PEL	10.0	mg/m3 TLV

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Solid pellets with slight or no odor. Spilled pellets create slipping hazard. Can burn in a fire creating dense toxic smoke. Molten plastic can cause severe thermal burns. Fumes produced during melt processing may cause eye, skin and respiratory tract irritation. Secondary operations, such as grinding, sanding or sawing, can produce dust which may present an explosion or respiratory hazard.

POTENTIAL HEALTH EFFECTS

EYE: Product may cause irritation or injury due to mechanical action.
SKIN: Pellets not likely to cause skin irritation.
INGESTION: Not acutely toxic.
INHALATION: Pellet inhalation unlikely due to physical form.

CHRONIC/CARCINOGENICITY

NTP: Not Tested
OSHA: Not Regulated

UPPER FLAMMABLE LIMIT:	Not Established
AUTOIGNITION:	538C (1000F), estimated
CONDITIONS OF FLAMMABILITY:	Requires a continuous flame source to ignite and sustain combustion.
EXPLOSION DATA	
IMPACT SENSITIVITY:	Not sensitive to mechanical impact.
STATIC DISCHARGE:	Not sensitive to static discharge. (See HANDLING AND STORAGE)

6. ACCIDENTAL RELEASE MEASURES

GENERAL: Sweep or gather up material and place in proper container for disposal or recovery. (See DISPOSAL INFORMATION)

7. HANDLING AND STORAGE

HANDLING: Follow recommendations on label and in processing guide. Prevent contact with skin and eyes. Use good industrial hygiene practices. Provide adequate ventilation. Secondary operations such as grinding, sanding or sawing may produce a dust explosion hazard. Use aggressive housekeeping activities to prevent dust accumulation; employ bonding, grounding, venting and explosion relief provisions in accordance with accepted engineering practices.

STORAGE: Store in a dry place away from moisture, excessive heat and sources of ignition. Avoid storage near foods to prevent food contamination.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, duct work and other surfaces using appropriate personal protection. For powders and residual dusts refer to HANDLING AND STORAGE section.

Ventilation requirements must be locally determined to limit exposure to processing fumes in the workplace. Design techniques and guidelines may be found in publications such as:

Industrial Ventilation; available from the American Conference of Governmental Industrial Hygienists, Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48901.

PERSONAL PROTECTION

EYE/FACE: Wear safety glasses with side shields or chemical goggles. In addition, use full face shield when cleaning processing fume condensates from hoods, ducts and other surfaces.

SKIN: When handling pellets avoid prolonged or repeated contact with skin. When melt processing product wear long pants, long sleeves, well insulated gloves and face shield when applicable. Use appropriate protective clothing, including chemical resistant gloves, to prevent any contact with processing fume condensates.

RESPIRATORY: When processing fumes are not adequately controlled, use respirator approved for protection from organic vapors and acid gases. When dust or powder from secondary operations, such as grinding

sanding or sawing, are not adequately controlled use respirator approved for protection from dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
ODOR AND APPEARANCE:	Plastic pellet with slight odor.
BOILING POINT:	Not Applicable
MELTING POINT:	See COMMENT below.
VAPOR PRESSURE (mmHg):	Negligible
VAPOR DENSITY (air=1):	Not Applicable
SPECIFIC GRAVITY (water=1):	>1
WATER SOLUBILITY:	Insoluble
% VOLATILES:	Negligible
pH:	Not Applicable
ODOR THRESHOLD:	Not Established
EVAPORATION RATE:	Negligible
COEFFICIENT WATER/OIL DISTR:	Not Established
COMMENT:	This product does not exhibit a sharp melting point, but softens gradually over a wide temperature range.

10. STABILITY AND REACTIVITY

STABILITY:	Stable under recommended conditions of storage and handling.
REACTIVITY:	Not reactive under recommended conditions of handling, storage, processing and use.
CONDITIONS TO AVOID:	Do not exceed melt temperature recommendations in product literature. In order to avoid autoignition/ hazardous decomposition of hot thick masses of plastic, purgings should be collected in small, flat shapes or thin strands to allow for rapid cooling and quench in water. (See EXPOSURE CONTROLS/PERSONAL PROTECTION section for respiratory protection advice.)
HAZARDOUS DECOMPOSITION:	Processing fumes evolved at recommended processing conditions may include trace levels of orthodichlorobenzene and phenol.

11. TOXICOLOGICAL INFORMATION

PRODUCT:

EYE:	Product not considered primary eye irritant. When similar products, in finely divided form, were placed into the eyes of rabbits, slight transient redness or discharge occurred - consistent with the expected slightly abrasive nature of the resin particles.
SKIN:	Product not considered primary skin irritant. Draize Skin Primary Irritation Score (rabbit) for similar products, in finely divided form, for a 24-hour exposure is 0. Not expected to be a skin sensitizer based on results of Modified Buehler Guinea Pig Sensitization Test from similar products. Dermal LD50 (rabbit) > 2g/kg, estimated.
ACUTE ORAL:	Oral LD50 (Rat) >5 g/kg, estimated.
ACUTE INHALATION:	Processing fumes from similar products are not considered toxic. In acute inhalation tests, laboratory rats were exposed to processing fumes at concentrations exaggerating those that would likely occur in workplace situations. No deaths or signs of toxicity were noted during the 6 hour fume exposure tests. There were no distinct or consistent

treatment related tissue or organ changes noted in gross necropsies.
COMPONENTS:
Polyetherimide resin is not a mutagen by Ames (Salmonella) Assay with and without activation.

12. ECOLOGICAL INFORMATION

GENERAL: Not expected to present any significant ecological problems.

13. DISPOSAL INFORMATION

RCRA HAZARDOUS WASTE: Product is not a RCRA hazardous waste.
WASTE DISPOSAL: Recycling is encouraged. Landfill or incinerate in accordance with federal, state and local requirements. Collected processing fume condensates and incinerator ash should be tested to determine waste classification.

14. TRANSPORTATION INFORMATION

DOT HAZARD CLASS: Not Regulated
PROPER SHIPPING NAME: Not Regulated
IDENTIFICATION NUMBER: Not Listed
IDGA: Not Listed

15. REGULATORY INFORMATION

Listed below are chemical substances subject to supplier notification requirements. The percentages, when present, represent average values.

CAS NUMBER / CHEMICAL NAME	SARA 313,%	WHMIS %	CA-65 %	FL	RI
13463-67-7 titanium dioxide (Ti O2)					X

TSCA STATUS: This product complies with the Chemical Substance Inventory requirements of the US EPA Toxic Substances Control Act (TSCA).
WHMIS CLASSIFICATION: Not a controlled product.
FDA STATUS: This product complies with US FDA Food Additive Regulations governing food contact (21CFR 177.1595).

16. OTHER

PREPARED BY: Product Compliance

The above information and recommendations are believed accurate and reliable. Because it is not possible to anticipate all conditions of use additional safety precautions may be required. GENERAL ELECTRIC COMPANY makes no warranty, either express or implied, including merchantability and fitness. USER RESPONSIBILITY: Each user should read and understand this information and incorporate it into individual site safety programs in accordance with applicable hazard communication standards and regulations.

affiliates.

REVISIONS IN THIS MSDS SINCE YOUR LAST ORDER ARE IN THE FOLLOWING SECTION(S):

THIS MATERIAL SAFETY DATA SHEET (MSDS) IS SPECIFIC TO THE PRODUCT LISTED. THIS FAX COPY FULLY COMPLIES WITH THE US OSHA HAZARD COMMUNICATION STANDARD (HAZ COM) (CFR 1910.1200) REQUIREMENTS AND THE CANADIAN WHMIS REGULATIONS.

A MORE FORMAL GE MSDS FOR THE PRODUCT(S) REQUESTED WILL BE MAILED TO YOU THE NEXT BUSINESS DAY VIA FIRST CLASS US MAIL. WHEN YOU HAVE RECEIVED THE FORMAL COPY, THE FAX COPY MAY BE DISCARDED.

IF YOU HAVE DIFFICULTY RECEIVING THIS FAX TRANSMISSION, PLEASE CONTACT GE PRODUCT SUPPORT:

GE PLASTICS (RESIN)	PH.(800)845-6600	FAX(413)448-7731
GE SPECIALTY CHEMICALS	PH.(800)872-0022	FAX(304)424-5871
GE STRUCTURED PRODUCTS (SHEET/FILM)	PH.(800)451-3147	FAX(413)448-7506
GE SUPERABRASIVES	PH.(800)443-1955	FAX(614)438-2413

GE Silicones

MATERIAL SAFETY DATA SHEET
LSR 2070 A - drum (200l-200kg)

Trade Name Silicone Rubber Compound - Component A

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Manufactured By GE Bayer Silicones GmbH & Co. KG
Bayer Werk Building V7
Leverkusen 06 51368
Revised: 03/10/2004
Preparer: PRODUCT STEWARDSHIP COMPLIANCE AND STANDARDS
Chemical Family/Use: Silicone Rubber
Formula: Mixture
CHEMTREC 1-800-424-9300

HMIS

Flammability	1	REACTIVITY	0	Health	0

NFPA

Flammability	1	REACTIVITY	0	Health	1

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS REG NO.	WGT. %
A. HAZARDOUS		
B. NON-HAZARDOUS		
VINYLPOLYDIMETHYLSILOXANE	68083-19-2	60 - 90 %
Treated Filler	68909-20-6	10 - 30 %
Water	7732-18-5	1 - 5 %
DIMETHYL, METHYVINYL SILOXANE,-DIMETHYLVINYL-TERMINATED	68083-18-1	1 - 5 %

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION! May cause eye irritation. Attention: Not for injection into humans. May generate formaldehyde at temperatures greater than 150 C(300 F). See Section 3 of MSDS for details.
liquid translucent Faint

POTENTIAL HEALTH EFFECTS

GE Silicones

MATERIAL SAFETY DATA SHEET
LSR 2070 A - drum (200l-200kg)

Trade Name **Silicone Rubber Compound - Component A**

INGESTION
None known.

SKIN
None known.

INHALATION
None known.

EYES
May cause mild eye irritation.

MEDICAL CONDITIONS AGGRAVATED
None known.

SUBCHRONIC (TARGET ORGAN)
None known.

CHRONIC EFFECTS / CARCINOGENICITY
This product or one of its ingredients present 0.1% or more is NOT listed as a carcinogen or suspected carcinogen by NTP, IARC, or OSHA.

ROUTES OF EXPOSURE
Eyes

OTHER
Attention: Not for injection into humans.This product contains methylpolysiloxanes which can generate formaldehyde at approximately 300 degrees Fahrenheit (150°C) and above, in atmospheres which contain oxygen. Formaldehyde is a skin and respiratory sensitizer, eye and throat irritant, acute toxicant, and potential cancer hazard. An MSDS for formaldehyde is available from GE Silicones.

INGESTION
Do not induce vomiting.If victim is conscious, give 2-4 glasses of water.Never give anything by mouth to an unconscious person.If symptoms persist, call a physician.

SKIN
Wash off with soap and water.

INHALATION
If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

GE Silicones

MATERIAL SAFETY DATA SHEET
LSR 2070 A - drum (200l-200kg)

Trade Name Silicone Rubber Compound - Component A

EYES
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

NOTE TO PHYSICIAN
None known.

[illegible]

FLASH POINT	>100 °C 212 °F
METHOD:	
IGNITION TEMPERATURE	
FLAMMABLE LIMITS IN AIR - LOWER (%)	not applicable
FLAMMABLE LIMITS IN AIR - UPPER (%)	not applicable
SENSITIVITY TO MECHANICAL IMPACT:	No

SENSITIVITY TO STATIC DISCHARGE
Sensitivity to static discharge is not expected.

EXTINGUISHING MEDIA
All standard extinguishing agents are suitable.

SPECIAL FIRE FIGHTING PROCEDURES
Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

[illegible]

ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
Wipe, scrape or soak up in an inert material and put in a container for disposal. Wash walking surfaces with detergent and water to reduce slipping hazard.

[illegible]

STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE
Keep container closed when not in use. Avoid contact with skin and eyes. Store away from heat, sources of ignition, and incompatibles. Keep away from children.

GE Silicones

MATERIAL SAFETY DATA SHEET
LSR 2070 A - drum (200l-200kg)

Trade Name **Silicone Rubber Compound - Component A**

EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS
ShowersEyewash stationsExhaust ventilation

RESPIRATORY PROTECTION
If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. A NIOSH/MSHA approved respirator with an organic vapor cartridge is generally acceptable. Supplied air respirators may be required for high vapor concentrations. Respiratory protection must be provided in accordance with OSHA regulations (see 29 CFR 1910.134).

PROTECTIVE GLOVES
Cloth gloves.

EYE AND FACE PROTECTION
Safety glasses

OTHER PROTECTIVE EQUIPMENT
Wear suitable protective clothing and eye/face protection.

Exposure Guidelines

Chemical	CAS REG NO.	ACGIH	OSHA	Supplier

PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT - C & F	230 °C 446 °F
VAPOR PRESSURE (20 C) (MM HG)	
VAPOR DENSITY (AIR=1)	
FREEZING POINT	16 °C 60.80 °F
MELTING POINT	16 °C 60.80 °F
PHYSICAL STATE	liquid
ODOR	Faint
COLOR	translucent
EVAPORATION RATE (BUTYL ACETATE=1)	
SPECIFIC GRAVITY (WATER=1)	ca. 1.13
DENSITY (KG/M3)	ca. 1,130 KG/M3
ACID / ALKALINITY (MEQ/G)	
pH	not applicable
VOLATILE ORGANIC CONTENT (VOL)	
SOLUBILITY IN WATER (20 C)	insoluble
SOLUBILITY IN ORGANIC SOLVENT (STATE SOLVENT)	Soluble in toluene
VOC EXCL. H2O & EXEMPTS (G/L)	

GE Silicones

MATERIAL SAFETY DATA SHEET
LSR 2070 A - drum (200l-200kg)

Trade Name **Silicone Rubber Compound - Component A**

[redacted]

STABILITY
Stable

HAZARDOUS POLYMERIZATION
WILL NOT OCCUR

HAZARDOUS THERMAL DECOMPOSITION / COMBUSTION PRODUCTS
Carbon monoxidecarbon dioxide (CO2)formaldehydeSilicon dioxide.

INCOMPATIBILITY (MATERIALS TO AVOID)
None known.

CONDITIONS TO AVOID
None known.

[redacted]

ACUTE ORAL
Unknown

ACUTE DERMAL
Unknown

ACUTE INHALATION
Unknown

OTHER:
None

SENSITIZATION

SKIN IRRITATION

EYE IRRITATION

MUTAGENICITY
Unknown

GE Silicones

MATERIAL SAFETY DATA SHEET
LSR 2070 A - drum (200l-200kg)

Trade Name Silicone Rubber Compound - Component A

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGY
no data available

CHEMICAL FATE
no data available

DISTRIBUTION

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD
Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

Not Regulated if Section is Blank

15. REGULATORY INFORMATION

US Regulatory Information

CERCLA PRODUCT COMPOSITION	Chemical	CERCLA Reportable Quantity

CLEAN AIR ACT

CLEAN WATER ACT

SARA SECTION 302

GE Silicones

MATERIAL SAFETY DATA SHEET
LSR 2070 A - drum (200l-200kg)

Trade Name **Silicone Rubber Compound - Component A**

SARA (311,312) HAZARD CLASS
None

SARA (313) CHEMICALS

Canadian Regulatory Information

WHMIS HAZARD CLASS
D2A VERY TOXIC MATERIALS

OTHER:

SCHDLE B/HTSUS

ECCN:

CALIFORNIA PROPOSITION 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

OTHER
These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate....., C = ceiling limit NEGL = negligible EST = estimated NF = none found NA = not applicable UNKN = unknown NE = none established REC = recommended ND = none determined V = recommended by vendor By-product = reaction by-product; TSCA inventory status not required under 40 CFR part 720.30(h-2) SKN = skin TS = trade secret R = recommended MST = mist ST = short term exposure limit NT = not tested ppm = parts per million ppb = parts per billion .....

GE Advanced Materials
Silicones
Product Stewardship, Compliance & Standards
260 Hudson River Road
Waterford, NY 12188

September 16, 2005

Ms. Joan Couture
Plastic Sterilizing Tray Corporation
1520 East Street
Pittsfield, MA 01201
E-Mail: pstc@bcn.net

Dear Ms. Couture

GE Advanced Materials, Silicones' industrial grade product line LSR20X0 has been USP Class VI tested under Good Laboratory Practices (GLP) using a representative lot of LSR2050 cured in to ASTM sheets. The material did not produce a biological response following intramuscular implantation in rabbits, intracutaneous injection in rabbits, or systemic injection in mice. Therefore, the test materials meet the requirements of USP XXIII, 1995, for Class VI Plastics -70°C.

These test results are based on single lots of GE Silicones' LSR2050 material. The difference between the LSR2050 and the LSR2070 that you purchase is the ratio of the components to create the different durometers. Although lot to lot variance would not be expected to show different test results, these data should not be construed as a warranty of fitness for use. Prior to use for any application other than an industrial use, the user has sole responsibility for determining the suitability of these products for any such application. Consequently, GE Silicones does not now, and does not intend to establish, a "master file" at FDA.

Please also note that GE Silicones has a long-standing policy on participation in certain product applications. GE Silicones is a supplier of industrial grade raw materials. GE Silicones may provide bulk raw materials to customers formulating or fabricating products for health care, personal care or other human body contact applications and may provide formulation recommendations and processing assistance in connection with those raw materials. GE Silicones will not knowingly promote the use of its products or sell to applications in which its products are implanted into the human body for 29 days or longer, are injected into the body or used for contraceptive purposes. GE Silicones will carefully evaluate participation in applications, which involve exposure to infants, children and pregnant or nursing mothers. It is the sole responsibility of the purchaser to select a particular GE Silicones product and determine its suitability for an application and to comply with all applicable statutory, regulatory, compatibility and industry requirements and standards for testing, safety, efficacy and labeling.

If you have any further questions, please contact Karen E. Lintz at 518-233-2723.