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SAFETY DATA SHEET
GLENAIR FLUOROCARBON
2050, 2051 & 2008 COMPOUND (Type 5, 6 & 8 Materials)

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME GLENAIR HEAT SHRINKABLE MOULDED PARTS
MANUFACTURER GLENAIR UK LIMITED
CHEMICAL FAMILY FLUOROCARBON POLYMER COMPOUND
PRODUCT USE Typical use of heat shrinkable parts is for electrical insulation, strain relief, environmental/mechanical protection and sealing.

These products may contain a hazardous substance that is regulated under US-OSHA; CAN-WHMIS; IOSH; ISO; UK-CHIP; or EU Directives (67/548/EEC-Dangerous Substance Labelling, 98/24/EC-Chemical Agents at Work, 99/45/EC-Preparation Labelling, 2001/58/EC-MSDS Content, and 1907/2006/EC-REACH). A MSDS/SDS is required because it may present a health and safety exposure or other hazard.

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: In common with most organic materials the products of thermal degradation and combustion may be toxic and should not be inhaled. This should not be significant at the temperature recommended in the installation procedures. At temperatures higher than those recommended and most significantly if the product burns and the combustion products may include among other substances, carbon monoxide, carbon dioxide, organic acids, aldehydes, acetic acid, low molecular weight hydrocarbons, hydrogen bromide, hydrogen fluoride, and oxides of nitrogen.

POTENTIAL HEALTH HAZARDS:

Proper installation of these products creates no known acute or chronic health hazard.

ACUTE HEALTH HAZARD:

EYES: Contact with molten material may cause thermal burns.
SKIN: These products are not expected to be skin irritant
INGESTION: Ingestion of these products is unlikely.
INHALATION: In common with most organic materials, thermal and combustion products may be toxic and should not be inhaled.

CHRONIC HEALTH HAZARDS

None of the ingredients to which users may be exposed and which are present to a greater than 0.1% of the product are listed by OSHA, NTP, or IARC as suspected carcinogens.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

Overheating the products to either charring or burning may produce vapours that may cause eye, skin and throat irritation.

SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

INGREDIENTS (Chemical/Common Name: CAS No.: % by Wt.: EC No.:
Not applicable- These products are manufactured articles.

Fluorocarbon polymer Heat Shrinkable Moulded Parts may be coated with or used in conjunction with adhesives, which are based on epoxies, olefin copolymers, polyesters or polyamides.

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SECTION 4: FIRST AID MEASURES.

EYE CONTACT: If eye irritation occurs, flush with clean water for 15 minutes and seek medical attention
SKIN CONTACT: First aid is not normally required. After handling product it is good practice to wash hands. If molten material contacts skin, cool immediately in water and treat as a burn, seek medical attention.
INGESTION: Not a normal route of exposure. However, if swallowed and symptoms develop seek medical attention.
INHALATION: If respiratory symptoms or other symptoms of exposure develop, move victim to fresh air. If symptoms persist seek medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASHPOINT: Not applicable
METHOD USED: Not applicable

FLAMMABLE LIMITS

UPPER FLAMMABILITY LIMIT (% BY VOLUME): Not applicable
LOWER FLAMMABILITY LIMIT (% BY VOLUME): Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

SUITABLE EXTINGUISHING MEDIA: Use carbon dioxide, water, dry chemical or foam.

SPECIAL FIRE FIGHTING PROCEDURES & PROTECTIVE EQUIPMENT

Fire fighters should wear self-containing breathing apparatus with a full face piece operated in the positive pressure demand mode when fighting fires.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Toxic fumes may be given off.

SPECIFIC HAZARDS IN CASE OF FIRE

None

HAZARDOUS COMBUSTION PRODUCTS

In common with most organic materials the products of thermal degradation and combustion may be toxic and should not be inhaled. This should not be significant at the temperature recommended in the installation procedures. At temperatures higher than those recommended and most significantly if the product burns and the combustion products may include among other substances, carbon monoxide, carbon dioxide, organic acids, aldehydes, acetic acid, low molecular weight hydrocarbons, hydrogen bromide, hydrogen fluoride and oxides of nitrogen.

SECTION 6: ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTIONS: See section 8: Exposure controls / personal protection

ENVIRONMENTAL PRECAUTION: Prevent spilled material from entering sewers and waterways.

SPILL CONTAINMENT & CLEANUP METHODS/MATERIALS: Sweep up and collect for disposal

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SECTION 7: HANDLING AND STORAGE:

PRECAUTIONS FOR SAFE HANDLING AND STORAGE:

Handling: Avoid any vapours given off if the parts are heated to decomposition, as shown by darkening or charring. Avoid contact with molten material. Heat-resistant gloves are required if hot products are handled after installation.

Installation: Follow appropriate Glenair installation instructions and application guides to ensure installation is performed properly. Do not touch hot surfaces of heat guns and other installation tools.

Storage: These products are stable under normal conditions.

SECTION 8; EXPOSURE CONTROLS/PERSONAL PROTECTION:

ENGINEERING CONTROLS/SYSTEM DESIGN INFORMATION: None

VENTILATION: Provide general or local exhaust ventilation systems.

RESPIRATORY PROTECTION: If installation occurs in a confined space, NIOSH/MSHA-approved respirators are recommended.

EYE PROTECTION: Use safety shield or goggles to prevent contact with the eyes.

SKIN PROTECTION: Avoid contact with the skin. Use heat resistant gloves.

EXPOSURE GUIDELINES & LIMITS

There are no established exposure limits for polymer mixtures.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Moulded parts in various shapes, black
ODOUR:	No odour
PHYSICAL STATE:	Solid
pH:	Not applicable
BOILING POINT:	Not applicable
MELTING POINT:	Not applicable
FREEZING POINT:	Not applicable
VAPOUR PRESSURE:	Not applicable
VAPOUR DENSITY:	Not applicable
SPECIFIC GRAVITY:	Not applicable
EVAPORATION RATE:	Not applicable
SOLUBILITY IN WATER:	Insoluble
FLASH POINT:	Not applicable
AUTO-IGNITION TEMPERATURE:	Not applicable
LOWER EXPLOSIVE LIMIT:	Not applicable
UPPER EXPLOSIVE LIMIT:	Not applicable
PARTITION COEFFICIENT:	Not applicable
VISCOSITY:	Not applicable
DECOMPOSITION TEMPERATURE:	Not determined

SECTION 10: STABILITY AND REACTIVITY:

STABILITY:	Stable under normal conditions
INCOMPATIBILITY:	None known
HAZARDOUS DECOMPOSITION:	See section 5
HAZARDOUS POLYMERISATION:	Will not occur
CONDITIONS TO AVOID:	Avoid overheating

SECTION 11: TOXICOLOGICAL INFORMATION:

ACUTE TOXICITY: Not determined.

ROUTES OF ENTRY/EFFECTS OF ACUTE OVEREXPOSURE:

Eye Contact: Contact with the molten material may cause burns

Skin Contact: This product is not expected to be a skin irritant

Ingestion: Ingestion is highly unlikely

Inhalation: In common with most organic materials overheating may result in thermal decomposition and decomposition products may be toxic and should not be inhaled.

SUBCHRONIC/CHRONIC TOXICITY

IRRITANCY OF PRODUCT: See above

SENSITISATION TO MATERIAL: NOT KNOWN

CARCINOGENICITY: None of the ingredients to which users may be exposed and which are present at equal to or greater than 0.1% is listed by ASHA, NTP, or IARC as carcinogens.

REPRODUCTIVE TOXICITY: None known

TETRATOGENICITY: None known

MUTAGENICITY: None known

TOXICOLOGICALLY SYNERGISTIC PRODUCTS: None known

SECTION 12: ECOLOGICAL INFORMATION:

PERSISTENCE & DEGRADABILITY: No data available

BIO-ACCUMATIVE POTENTIAL: No data available

AQUATIC TOXICITY: No data available

SECTION 13: DISPOSAL CONSIDERATIONS:

WASTE DISPOSAL METHOD: Treatment, storage, and disposal must be in accordance with applicable local regulations.

SECTION 14: TRANSPORT INFORMATION:

GROUND – US.DOT/CAN-TDG/EU-ADR/APEC-ADR:

Proper Shipping Name	Not subject to HMR		
Hazard Class	NA	ID No.	NA
Packing Group	NA	Labels	NA

AIRCRAFT – ICAO-IATA

Proper Shipping Name	Not subject to DGR		
Hazard Class	NA	ID No.	NA
Packing Group	NA	Labels	NA

VESSEL – IMO-IMDG:

Proper Shipping Name	Not subject to DGR		
Hazard Class	NA	ID No.	NA
Packing Group	NA	Labels	NA

SECTION 15: REGULATORY INFORMATION:

U.S. FEDERAL REGULATION:

TSCA Section 8b-Inventory Status: All chemicals comprising this product are either exempt or listed on the TSCA Inventory.

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TSCA Section 12b – Export Notification: If the product contains chemicals subject to TSCA they are listed below.

Chemical	CAS#
None	NA

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT)
Chemicals present requiring reporting**

Chemical	CAS#
None	NA

**SARA TITLE 111 (SUPERFUND AMENDMENT AND REAUTHORISATION ACT)
If the product contains chemicals subject to the reporting requirements of section 313 of SARA Title 111, they are listed below**

Chemical	CAS#
None	NA

CERCLA SECTION 311/312 HAZARD CATEGORIES: These products are except from these regulations

STATE REGULATION (US): CALIFORNIA PROPOSTION 65

The following chemicals identified to exist in the product as distributed into commerce are known to the State of California to cause cancer, birth defects, or other reproductive harm:

Chemical	CAS#
None	NA

INTERNATIONAL REGULATION (Non US)

Canadian Domestic Substance List (DSL): Not applicable

WHMIS Classification: Not applicable

NPRI and Ontario Regulation 127/01

This product contains the following chemicals subject to reporting.

Chemical	CAS#
None	NA

European Inventory of Existing Commercial Chemical Substances (EINECS)

All ingredients remaining in the product as distributed into commerce are except from, or included on, the European Inventory of Existing Commercial Chemical Substances.

European Communities (EC) Hazard Classification according to directives 67/548/EEC and 1999/45/EC

R-Phrases
None

S-Phrases
None

SECTION 16: OTHER INFORMATION

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UPDATE ISSUE 2 JUNE 2015 (deletion of 2012 compound, addition of 2051 compound)