9737070 9731446 U69830 9723760 9739275 9731447 9706633 9727554-9741062 9734947 FPC 9710682 9728478 9731069 9719976 9728479 V#029705 SAFETY DATA SHEET 9729035 9729490

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Union standards

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): PRODUCT NUMBERS:

CHEMICAL NAME: PRODUCT USE: MANUFACTURER'S NAME: ADDRESS:

BUSINESS PHONE: FAX NUMBER: DATE OF PREPARATION: **Hot Melt Glue**

500, 601, 701, 702, 707, 708, 711, 724, 725, 726, 727, 729, 735, 738, 739, 3100, 3120, 3130, 3140, 3145, 3150, 3170, 3190, 3210, 3220, 3240, 1130320, AP5SB, BS-12, FM-15, FS-12, GS-15, HT-25,JS-12, RM-5H, RR-5, TL-15, WS-12, All DT, GL, CO and HL series Hot Melt Glue Hot Melt Adhesive FPC Corporation 355 Hollow Hill Drive Wauconda, IL 60084 847-487-4583

2. HAZARD IDENTIFICATION

847-487-0174

September 19, 2017

EMERGENCY OVERVIEW:

Product Description: This product is a solid in various colors, with no odor.

Health Hazards: This product as supplied is classified as an Article and is not expected to cause adverse health effects. **Flammability Hazards:** This product is combustible above flash point >450°F (>232°C) if exposed to ignition source.

Reactivity Hazards: None known.

Environmental Hazards: This material is not expected to be an environmental hazard

Emergency Considerations: Emergency responders must wear the proper personal protective equipment (and have appropriate fire-suppression equipment) suitable for the situation to which they are responding.

US DOT SYMBOLS

CANADA (WHMIS) SYMBOLS

EUROPEAN and (GHS) Hazard Symbols

None Signal Word: None

Non-Regulated Materal

Not Controlled

This product as supplied does not meet the definition of a hazard class, as defined by HAZCOM 2012 / 29CFR 1910.1200 and the European Union Council Directives 67/548/EEC and subsequent Directives in 76/768/EEC. This product is being evaluated as an Article.

This product as supplied is classified as an "article" according to Title 29 of the Code of Federal Regulations, OSHA Part 1910.1200.

"Article means a manufactured item other than a fluid or particle, which is formed to a specific shape or design during manufacture which has end use function dependent in whole or in part upon its shape or design during end use, and which under normal conditions of use does not release more than very small quantities or trace amounts of a hazardous chemical, and does not pose a physical hazard or health risk to employees."

This product as supplied is odorless, stable, and poses no immediate hazard to health.

GHS LABELING AND CLASSIFICATION:

Classification of the substance or mixture according to OSHA HCS 2012 / 29 CFR 1910. 1200 and Regulation (EC) No 1272/2008, EU No 2015/830 (Amended 1907/2006) and EU 2016/1688

CAS# 24937-78-8 is not listed in ESIS CAS# 69430-35-9 is not listed in ESIS

EC# 232-479-9 This substance is not classified in the Annex VI

CAS# 68441-37-2 is not listed in ESIS

CAS# 9002-88-4 is not listed in ESIS

COMPONENT(S) DETERMINING HAZARD:

All Ingredients

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GHS Hazard Classification(s):

Not Classified

Hazard Statement(s):

None applicable

Precautionary Statement(s):

None applicable

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE: This product as supplied is not expected to cause adverse health effects when used as intended. Ingestion of this product is not a likely route of entry. May cause gastrointestinal irritation if swallowed. Not expected to cause respiratory irritation.

CHRONIC: None known

TARGET ORGANS:

ACUTE: None known

CHRONIC: None known

3. COMPOSITION and INFORMATION ON INGREDIENTS

Hazardous Ingredients:	CAS#	EINECS #	ICSC#	WT %	GHS CLASSIFICATION(S)
Ethylene Vinyl Copolymer	24937-78-8	Not Listed in ESIS	Not Listed	55 - 75%	Not Classified
Resin	69430-35-9	Not Listed in ESIS	Not Listed	0 – 45%	Not Classified
Resin acids and Rosin acids, esters with pentaerythritol	8050-26-8	232-479-9	Not Listed	0 – 45%	Not Classified
Hydrocarbon resin	68441-37-2	Not Listed in ESIS	Not Listed	0 – 45%	Not Classified
Polyethylene Wax	9002-88-4	Not Listed in ESIS	Not Listed	0 - 10%	Not Classified

NOTE: This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000. This material is classified as non-hazardous under OSHA regulations 29 CFR 1910.1200.

4. FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

SKIN CONTACT: Exposure to non-molten product is not expected to cause adverse effects. Wash hands after handling. If hot molten product contacts skin, cool under running water. Do not remove solidified product. The contaminated individual should seek medical attention.

EYE CONTACT: Exposure to non-molten product is not expected to cause adverse effects. If hot product enters the eyes, flush with water for at least 15 minutes. Contaminated individual should seek medical attention immediately.

INHALATION: If breathing becomes difficult remove contaminated individual to fresh air. Seek medical attention if breathing difficulties continues.

INGESTION: Routine use of this product is not expected to cause any situation which could lead to ingestion. If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION.

If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.



5. FIRE-FIGHTING MEASURES

FLASH POINT: >450°F (>232°C)

AUTOIGNITION TEMPERATURE: Not Established

FLAMMABLE LIMITS (in air by volume, %): Lower NA Upper NA

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing materials appropriate for surrounding fire including water spray (for cooling), dry extinguishing media, carbon dioxide, foam. A solid stream of water may scatter molten product.

<u>UNUSUAL FIRE AND EXPLOSION HAZARDS:</u> This product has no unusual fire or explosion hazards. Do not use water on molten adhesive to avoid splattering and spreading the fire.

Explosion Sensitivity to Mechanical Impact: Not Sensitive Explosion Sensitivity to Static Discharge: Not Sensitive

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

HEALTH 0 REACTIVITY

NFPA RATING

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

OTHER

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Collect and contain for salvage or disposal.

<u>DISPOSAL:</u> Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations).

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: Use good hygiene practices.

STORAGE AND HANDLING PRACTICES: Store in a cool dry location. Protect from physical damage.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

<u>VENTILATION AND ENGINEERING CONTROLS:</u> Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation, and process enclosure if necessary. **EXPOSURE LIMITS/GUIDELINES:**

Component Name	CAS#	ACGIH-TLV's	OSHA PEL's	NIOSH-TLV's	Other
Ethylene Vinyl Copolymer	24937-78-8	Not Listed	Not Listed	Not Listed	None
Resin	69430-35-9	Not Listed	Not Listed	Not Listed	None
Resin acids and Rosin acids, esters with pentaerythritol	8050-26-8	Not Listed	Not Listed	Not Listed	None
Hydrocarbon resin	68441-37-2	Not Listed	Not Listed	Not Listed	None
Polyethylene Wax	9002-88-4	Not Listed	Not Listed	Not Listed	None

Currently, International exposure limits are established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.



RESPIRATORY PROTECTION: Not required for product as supplied. When thermal processing fumes are generated and ventilation is not sufficient to effectively remove them appropriate approved respiratory protection must be provided. Heated product will emit vapors and exposed workers may need to use a NIOSH approved, organic vapor canister type respirator. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. Federal OSHA's Respiratory Protection Standard (1910.134-1998) or the regulations of various U.S. States, Canada, EU Member States, or those of Japan. Air-purifying respirators with dust/mist/fume filters are recommended if operations may produce mists or sprays from this product.

EYE PROTECTION: Not required for product as supplied. Wear chemical goggles, face shield if handling molten material. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

<u>HAND PROTECTION:</u> Not required for product as supplied. Wear thermal insulating gloves to protect from thermal burns. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

<u>BODY PROTECTION:</u> Not required for product as supplied. When thermal processing wear work clothing sufficient to prevent skin contact. If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

9. PHYSICAL and CHEMICAL PROPERTIES

SOFTENING POINT: 190°F (88°C)

SPECIFIC GRAVITY @ 20°C: 0.918 - 0.960 (water=1)

VAPOR PRESSURE, mm Hg @ 20°C (68°F): NA

ODOR THRESHOLD: No odor

EVAPORATION RATE (n-BuAc=1): Not Applicable

SOLUBILITY IN WATER: Non soluble

pH: NA

APPEARANCE, ODOR and COLOR: This product is a solid in various colors, with no odor.

10. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: Thermal degradation produces carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: The product may react to strong acids, bases and oxidizing agents

POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.

CONDITIONS TO AVOID: Avoid excessive overheating. Do not add water or other volatile material to molten adhesive.

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

No LD50 Data Available for this product

Acute toxicity	Based on available data, the classification criteria are not met
Skin corrosion / irritation	Based on available data, the classification criteria are not met
Serious eye damage / irritation	Based on available data, the classification criteria are not met
Respiratory or skin sensitization	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met
Carcinogenicity	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met

SUSPECTED CANCER AGENT: The components of this product are not listed by agencies tracking the carcinogenic potential of chemical compounds as follows:



Carcinogenity

NTP Regulated

No

IARC Regulated

No

OSHA Regulated

No

IRITANCY OF PRODUCT: This product can cause skin and eye irritation.

SENSITIZATION TO THE PRODUCT: These products are not known to cause human skin or respiratory sensitization.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this product and its components on the human reproductive system.

Mutagenicity: The components of this product are not reported to produce mutagenic effects in humans.

Embryotoxicity: The components of this product are not reported to produce embryotoxic effects in humans.

Teratogenicity: The components of this product are not reported to produce teratogenicity effects in humans.

Reproductive Toxicity: The components of this product are not reported to produce reproductive effects in humans.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY IN SOIL: These products have not been tested for mobility in soil.

PERSISTENCE/DEGRADABILITY: These products have not been tested for persistence or biodegradability. The components may slowly degrade in the environment and form a variety of organic and inorganic materials; however, no specific information is known.

ENVIRONMENTAL STABILITY: These products have not been tested for environmental stability.

BIOACCUMULATION/ACCUMULATION: These products have not been tested for bio-accumulation potential.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101. Non-Regulated

TRANSPORT CANADA, TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: These products are not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): These products are not classified as Dangerous Goods, by rules of IATA:

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: These products are not classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): These products are not classified by the United Nations Economic Commission for Europe to be dangerous goods

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA REPORTING REQUIREMENTS: The components of these products are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA THRESHOLD PLANNING QUANTITY: There are no specific Threshold Planning Quantities for any component of these products. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) therefore applies, per 40 CFR 370.20.

U.S. CERCLA REPORTABLE QUANTITY (RQ): None.

U.S. TSCA INVENTORY STATUS: The components of these products are listed in the TSCA Inventory.

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): This product does not contain any component above the 0.1% level which is listed as a California Proposition 65 chemical.

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CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are on the DSL Inventory, or are exempted from listing.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS: No component of this product is on the CEPA First Priorities Substance Lists.

CANADIAN WHMIS CLASSIFICATION and SYMBOLS: Complies with WHMIS 2015

EUROPEAN ECONOMIC COMMUNITY INFORMATION:

SEE SECTION 2 FOR DETAILS

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): This product does not contain any chemical on the Candidate List.

<u>EU RoHS 2011/65/EU:</u> This product does not exceed the maximum concentration values (MCVs) in EU Directive 2002/95/EC (Restriction of the Use of Certain Hazardous Substances (RoHS) in Electrical and Electronic Equipment), as amended, and/or the MCVs set under EU Directive 2011/65/EU (RoHS recast), as stated in Annex II to that directive. This which means that each of the homogenous materials within this product does not exceed the following MCVs: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium.

AUSTRALIAN INFORMATION FOR PRODUCT:

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS: The components of this product are listed on the AICS or are exempt.

STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS: Not applicable.

JAPANESE INFORMATION FOR PRODUCT:

JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS: The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

INTERNATIONAL CHEMICAL INVENTORIES:

Listing of the components on individual country Chemical Inventories is as follows:

Asia-Pac: Listed or exempt

Australian Inventory of Chemical Substances (AICS): Listed or exempt

Korean Existing Chemicals List (ECL): Listed or exempt

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed or exempt Philippines Inventory if Chemicals and Chemical Substances (PICCS): Listed or exempt

Swiss Giftliste List of Toxic Substances: Listed or exempt

U.S. TSCA: Listed or exempt

16. OTHER INFORMATION

PREPARED BY: Chris Eigbrett

DATE OF PRINTING: September 14, 2017

MSDS to GHS Compliance

Revision Log:

09/19/2017

- Added clarification regarding HCS 2012 compliance and updated template for EU compliance.

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End of SDS Sheet

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