



elemelt®

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SAFETY DATA SHEET

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

1.1 TRADE NAME (AS LABELED): **HMS425**

CHEMICAL NAME: Hot Melt Adhesive

1.2 PRODUCT USE: Hot Melt Adhesive

1.3 MANUFACTURER'S NAME: **Ellsworth Adhesives**

ADDRESS: W129 N1085 Washington Drive
Germantown, WI 53022

BUSINESS PHONE: 262-253-8600

1.4 DATE OF PREPARATION: April 20, 2018

2. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Product Description: This product is a light grey solid with no odor.

Health Hazards: This material can cause irritation to the skin, eyes and mucous membranes. Contact with molten material will cause thermal burns.

Flammability Hazards: This product is flammable with a flash point 450°F (>232°C)

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

Non-Regulated Material

Complies with WHMIS 2015



Signal Word: **Warning!**

2.1 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# 29160-13-2 is not listed in ESIS

Substances not listed either individually or in group entries must be self classified

COMPONENT(S) DETERMINING HAZARD:

1-Butene, polymer with 1-propene

2.2 LABEL ELEMENTS:

GHS Hazard Classification(s):

Acute Oral Toxicity Category 5

Acute Dermal Toxicity Category 5

Eye Irritant Category 2B

STOT SE Category 3 (Respiratory Irritation)

Hazard Statement(s):

H303: May be harmful if swallowed

H313: May be harmful in contact with skin

H320: Causes eye irritation

H335: May cause respiratory irritation



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SAFETY DATA SHEET

Prevention Statement(s):

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash hands thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.

Response Statement(s):

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P304+P340: IN INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER/doctor if you feel unwell.

Storage Statement(s):

P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.

Disposal Statement(s):

P501: Dispose of contents/containers in accordance with local/regional/national/international regulations.

2.3 OTHER HAZARDS:

Mixture does not meet the criteria for PBT or vPvB in accordance with Annex XIII.

HEALTH HAZARDS OR RISKS FROM EXPOSURE:

ACUTE: This material may cause irritation to skin, respiratory system and eyes. Ingestion of this product may cause gastrointestinal irritation. Contact with molten material may cause thermal burns.

CHRONIC: None known

TARGET ORGANS: ACUTE: Eye, Skin, Respiratory System CHRONIC: None known

3. COMPOSITION and INFORMATION ON INGREDIENTS

Ingredients:	CAS #	EINECS #	ICSC #	WT %	GHS Classification
1-Butene, polymer with 1-propene	29160-13-2	Not Listed in ESIS	Not Listed	>99%	ACUTE TOX CAT 5 (ORAL / DERMAL), EYE IRRIT CAT 2B, STOT SE CAT 3 (RESP IRRIT)

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF 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 EXPOSURE: If hot product contacts skin, cool under running water. Do not remove solidified product. The contaminated individual should seek medical attention.

EYE EXPOSURE: 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.

4.2 MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

4.3 RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.



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SAFETY DATA SHEET

5. FIRE-FIGHTING MEASURES

5.1 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.

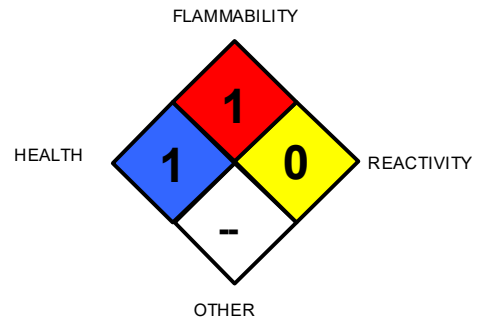
5.2 UNUSUAL FIRE AND EXPLOSION HAZARDS: This product has no unusual fire or explosion hazards. Do not use water on molten adhesive to avoid splattering and spreading the fire.

Explosion Sensitivity to Mechanical Impact: Not Sensitive

Explosion Sensitivity to Static Discharge: Not Sensitive

5.3 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.

NFPA RATING



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

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Provide adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

6.2 ENVIRONMENTAL PRECAUTIONS: Not applicable.

6.3 SPILL AND LEAK RESPONSE: Personnel should be trained for spill response operations. Wear appropriate protective equipment such as rubber gloves, safety glasses, and appropriate body protection. Stop discharge if safe to do so.

PELLET OR CHIP SPILL: Collect and contain for salvage or disposal.

MOLTEN ADHESIVE SPILL: Placard "Hot Material", allow to cool and remove. Collect and contain for salvage or disposal. Stop material from contaminating soil or from entering sewers or water streams.

DISPOSAL: Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). Dispose of recovered material and report spill per regulatory requirements. It is recommended you contact local authorities to determine if there may be other local reporting requirements.

7. HANDLING and STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing mists or sprays generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

7.2 STORAGE AND HANDLING PRACTICES: All employees who handle this material should be trained to handle it safely. Avoid contact with eyes, skin and clothing. Keep the container tightly closed and dry.

EMPTY CONTAINER PRECAUTION: Attention! Follow label warnings even after container is emptied since empty containers may retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for humans or animal consumption, or where skin contact can occur.

7.3 SPECIFIC USES: See section 1.2.



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SAFETY DATA SHEET

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

8.1 EXPOSURE LIMITS/GUIDELINES:

<u>Component Name</u>	<u>CAS#</u>	<u>ACGIH-TLV's</u>	<u>OSHA PEL's</u>	<u>NIOSH- TLV's</u>	<u>Other</u>
1-Butene, polymer with 1-propene	29160-13-2	Not Listed	Not Listed	Not Listed	None

8.2 VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use local exhaust ventilation, and process enclosure if necessary, to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

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: When dusts or 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: Safety glasses and/or face shield or splash goggles, for fumes which may arise from thermal processing. 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.

HAND PROTECTION: Wear rubber 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.

BODY PROTECTION: 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

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE, ODOR and COLOR: This product is a light grey solid with no odor.

SOFTENING POINT: 190°F (88°C)

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

SPECIFIC GRAVITY @ 20°C: Not Available (water=1)

SOLUBILITY IN WATER: Non soluble

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

pH: NA

ODOR THRESHOLD: No odor

FLASH POINT: >450°F (>232°C)

AUTOIGNITION TEMPERATURE: Not Established

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

9.2 OTHER INFORMATION:

No additional information available at this time.



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10. STABILITY and REACTIVITY

10.1 REACTIVITY: No data available.

10.2 STABILITY: Stable.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Will not occur.

10.4 CONDITIONS TO AVOID: Avoid excessive overheating.

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

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

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Acute Oral LD50 Rat: >500 g/kg

Acute Dermal LD50 Rabbit: >200 g/kg

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.

12.1 TOXICITY: No specific data available on this product.

12.2 PERSISTENCE AND 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.

12.3 BIOACCUMULATIVE POTENTIAL: These products have not been tested for bio-accumulation potential.

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

12.5 RESULTS OF PBT AND vPvB ASSESSMENT: No specific data available on this product.



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12.6 OTHER ADVERSE EFFECTS: No known significant effects or critical hazards.

12.7 WATER ENDANGERMENT CLASS: No specific data available for this product.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

13.2 EU WASTE CODE: Not determined.

14. TRANSPORTATION INFORMATION

14.1 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

15.1 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): Not applicable.

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.

15.2 CANADIAN REGULATIONS:

CANADIAN DSL/NDL 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: Classified per WHMIS 2015.

15.3 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.

EU RoHS 2011/65/EU: 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.



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15.4 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.

15.5 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.

15.6 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 of 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

DATE OF PRINTING: Chris Eigbrett
April 20, 2018

MSDS to GHS Compliance

Revision Log: 09/18/2017 - Added clarification regarding HCS 2012 compliance and updated template for EU compliance.
04/20/2018 - Updated Section 3 to clarify ingredient disclosure.

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