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PART 1. THERMOPLASTIC BUMPER

1.0 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Thermoplastic Bumper

Company Distributor: Keystone Automotive Industries

700 East Bonita Avenue

Pomona, CA 91767

Company Phone: 1-800-772-5557

Manufactured By: The Dow Chemical Company/Autolign

24 hour Emergency Phone Number: 517-636-4400

Customer Information Center: 1-800-258-2436

Product Use: Replacement Crash Part.

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	% BY WEIGHT
Polyurethane from 4, 4'-methylenediphenyl diisocyanate, 1, 4-butanediol, and 2-oxepanone	068259-27-8	20-80%
Acrylonitrile/butadiene styrene resin	009003-56-9	80-20%
Wax	068476-05-1	0-20%
Styrene monomer	000100-42-5	2000 ppm max.

3.0 HAZARDS IDENTIFICATION


EMERGENCY OVERVIEW

* Milky white solid pellets. Faint odor. Toxic fumes are released in fire Situations. *

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: Solid or dust may cause irritation or corneal injury due to mechanical action.

SKIN: Essentially nonirritating to skin. Mechanical injury only. Skin absorption is

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unlikely due to physical properties.

INGESTION: Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

INHALATION: Dust may cause irritation to upper respiratory tract.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

CANCER INFORMATION: This mixture contains a component(s) which are listed as potential carcinogens for hazard communication purposes under OSHA Standard 29 CFR 1910.1200. Components listed by IARC: styrene monomer. Neither the data from various long-term animal studies nor from epidemiology studies of workers exposed to styrene provide an adequate basis to conclude that styrene is carcinogenic. The very small quantities of monomer, as indicated in Section 2 are not expected to cause any hazardous condition because of the low concentration in the resin. As the resin is supplied, monomer is not likely to be released into the surroundings in toxicologically significant amounts. Monomer may be released during processing of the resin and the hazard may vary from negligible to very low depending on actual exposure conditions.


4.0 FIRST AID MEASURES

EYES: Flush eyes with plenty of water; mechanical effects only.

SKIN: Wash off in flowing water or shower.

INGESTION: No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

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NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5.0 FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: None

METHOD USED: Not applicable.

AUTOIGNITION TEMPERATURE: Not applicable.

FLAMMABILITY LIMITS

LFL: Not applicable


UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions polymers decompose. The smoke may contain polymer fragments of varying compositions in addition to unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to: Carbon dioxide, carbon monoxide. Hazardous combustion products may include trace amounts of : Styrene, hydrogen cyanide.

OTHER FLAMMABILITY INFORMATION: Dense smoke is emitted when burned without sufficient oxygen. Mechanical handling can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate.

EXTINGUISHING MEDIA: Water, carbon dioxide, dry chemical.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny

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unnecessary entry. Cool surroundings with water to localize fire zone. Hand held carbon dioxide or dry chemical extinguishers may be used for small fires. Soak thoroughly with water to cool and prevent re-ignition.

PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS: Wear positive-pressure self contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves) . If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6.0 ACCIDENTAL RELEASE MEASURES

PROTECT PEOPLE: Pellets or beads may present a slipping hazard.

PROTECT THE ENVIRONMENT: Keep out of irrigation ditches, sewers, and water supplies. Spills should be collected to prevent contamination of waterways.

CLEANUP: Sweep up.


7.0 HANDLING AND STORAGE

HANDLING: Good housekeeping and controlling dusts are necessary for safe handling of product. Workers should be protected from the possibility of contact with molten resin during fabrication.

STORAGE: Store in a dry place.

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Control airborne concentrations below the exposure guideline. Good general ventilation should be sufficient for most conditions. Local

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exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT EYE/FACE PROTECTION: Use safety glasses. If there is a potential for exposure to particles which could cause mechanical injury to the eye, wear chemical goggles.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed.


RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. For most conditions, no respiratory protection should be needed; however, if handling at elevated temperatures without sufficient ventilation, use an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator.

EXPOSURE GUIDELINE(S): Styrene, monomer: ACGIH TLV and OSHA PEL are 50 ppm TWA, 100 ppm STEL, skin. PELs are in accord with those recommended by OSHA, as in the 1989 revision of PELs.

A "skin" notation following the exposure guideline refers to the potential for dermal absorption of the material. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposures should be considered.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Milky white solid pellets.
Odor:	Faint odor.
VAP Press:	Not applicable
VAP Density:	Not applicable
Boiling Point:	Not applicable
Solubility in Water:	Insoluble
Specific Gravity:	1.05-1.15

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10.0 STABILITY AND REACTIVITY

CHEMICAL STABILITY: Thermally stable at typical use temperatures.

CONDITIONS TO AVOID: Avoid temperatures above 500F, 260C. Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Processing may release fumes which may include polymer fragments and other decomposition products. Fumes can be irritating. At temperatures exceeding melt temperatures, polymer fragments can occur. Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.


11.0 TOXICOLOGICAL INFORMATION

(See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

INGESTION: Single dose oral LD50 has not been determined.

12.0 ECOLOGICAL INFORMATION

(For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

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ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration is expected because of the high molecular weight (MW>1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

DEGRADATION & PERSISTENCE: This water insoluble polymeric solid is expected to be inert in the environment. Surface photo degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.


ECOTOXICITY: Not expected to be acutely toxic, but pellets may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

13.0 DISPOSAL CONSIDERATIONS

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

KEYSTONE AUTOMOTIVE INDUSTRIES, INC. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients)

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal

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destruction device, or landfill.

14.0 TRANSPORT INFORMATION

U. S. DEPARTMENT OF TRANSPORTATION (D.O.T.):

This product is not regulated by D.O.T. when shipped domestically by land.

15.0 REGULATORY INFORMATION

(Not meant to be all-inclusive--selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS


SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
STYRENE	000100-42-5	2000 PPM

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) is considered, under applicable definitions, to meet the following categories:

A delayed health hazard

CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986:

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WARNING: This product contains a chemical (s) known to the State of California to cause cancer.

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of

New Jersey
Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.


CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

D2A

16.0 OTHER INFORMATION

None

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PART 2. PRIMER

1.0 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Primer

Company Distributor: Keystone Automotive Industries

700 East Bonita Avenue

Pomona, CA 91767

Company Phone: 1-800-772-5557

Manufactured By: Transtar Autobody Technologies/Autolign

Emergency Phone: 1-800-424-9300 Chemtrec

Product Use: Replacement Crash Part

2.0 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	% BY WEIGHT
Acrylic Polymer	Non Hazard	15 – 25 %
Talc	14807-96-6	15 – 25 %
Barium Sulfate	7727-43-7	15 – 25 %
Acrylic Monomer	97-88-1	Trace


See Section 15, Regulatory Information for code descriptions.

Weight percent (%) of 0.0 means chemical is in trace amounts.

3.0 HAZARDS IDENTIFICATION

This product is nonhazardous and represents no hazards to health or the environment when used as directed.

HMIS Hazard Ratings: Health = 1, Flammability =0, Chemical Reactivity =0

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Note: HMIS ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Potential Health Effects

Eyes: Dust from sanding can be irritating to the eyes.

Skin: None to minimal hazard to the skin

Inhalation: Dust from sanding may contain respirable size particles which can be irritating or damaging to the respiratory tract and lungs.

Ingestion: Slight irritation to the digestive tract.

4.0 FIRST AID MEASURES

Seek professional medical attention for all over-exposures and /or persistent problems.

Eye Contact: Flush eyes with clean water for a minimum of 15 minutes. Seek medical attention if problems persist.

Skin Contact: Wash exposed area thoroughly with soap and water.

Inhalation: Remove person from area to fresh air. If breathing difficulty persists, seek medical attention.

Ingestion: **DO NOT INDUCE VOMITING.** Seek immediate medical attention.


5.0 FIRE FIGHTING MEASURES

Flammable Properties

Flash Point: N/A **Method:** TCC

Upper Explosive Limit (UEL): N/A

Lower Explosive Limit (LEL): N/A

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Auto Ignition Temperature: No data

Extinguishing Media: Foam, Alcohol Foam, CO₂, Dry Chemical, and Water Fog.

Special Firefighting Procedures: Full fire fighter equipment including SCBA should be worn to avoid skin contact and inhalation of concentrated vapors. Minimize skin exposure. Highly toxic fumes may be generated by thermal decomposition.

Hazardous Combustion Products: Carbon Monoxide, Carbon Dioxide, and Oxides of Nitrogen.

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards.

6.0 ACCIDENTAL RELEASE MEASURES

Sweep up and transfer to an appropriate container for disposal.


7.0 HANDLING AND STORAGE

Keep away from heat and flames.

8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

CHEMICAL NAME/EXPOSURE LIMITS	CAS NUMBER
Acrylic Polymer OSHA PEL: NA, ACGIH TLV: NA, OTHER: NA	Non Hazard
Talc OSHA PEL: 20 mppcf, ACGIH TLV: 2 mg/m ³	14807-96-6
Barium Sulfate OSHA PEL: 5 mg/m ³ , ACGIH TLV: 5 mg/m ³ , OTHER: NA	7727-43-7
Acrylic Monomer OHS A PEL: NA, ACGIH TLV: NA, OTHER: 50 ppm	97-88-1

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Engineering Controls: Use with adequate ventilation. If normal ventilation is not adequate use exhaust fan.

Respiratory Protection: Utilize engineering controls to reduce emission levels below the time weighted exposure limits (ACGIH TLV & OSHA PEL). Wear an approved respirator if exposure limits are above the exposure limits listed above.


Eye Protection: Use safety glasses.

Skin Protection: Use impermeable chemical gloves for skin protection.

Safe Work Practices: Eye washes and safety showers in the workplace are recommended. Avoid contact with skin and eyes. Avoid breathing vapors. Wash hands thoroughly after using and before eating, drinking or smoking. Smoking in area where this material is used **should be strictly prohibited**. Keep food and drink away from material and from area where material is being used.

9.0 PHYSICAL AND CHEMICAL PROPERTIES

Physical Form:	Homogeneous mixture	
Physical State:	Solid	
Color:	Black	
Odor:	No odor present	
Odor Threshold:	No data	
Specific Gravity (water= 1)	1.74	
Vapor Pressure:	No data	
Vapor Density:	N/A	
Material VOC:	0.02 LB/gl	2 g/l
Coating VOC:	0.03 LB/gl	3 g/l
Evaporation Rate:	N/A	

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Boiling Point:	329° F
Melting Point:	No data
Freezing Point:	No data
Viscosity at Ambient Temperature:	No data
Solubility in Water:	Insoluble
Octanol/Water Partition Coefficient:	No data
pH:	No data

10.0 STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Water based product. None anticipated.

Hazardous Polymerization: WILL NOT OCCUR.

11.0 TOXICOLOGICAL INFORMATION

Effects of Exposure: No acute or chronic health effects identified or anticipated.

Acute Toxicity Data: No data.

Carcinogenicity: NTP – No, IARC – No, OSHA – No

This product has not been tested for carcinogenic effects. Some material in this product may be identified by NTP, IARC and / or OSHA as carcinogenic, indicated above as "Yes". No further information available.


Teratology: No data

Reproduction: No data

Mutagenicity: No data

12.0 ECOLOGICAL INFORMATION

No data.

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13.0 DISPOSAL CONSIDERATIONS

This product when disposed represents a non-hazardous waste, as identified in 40CFR261. It is the responsibility of each waste generator to identify the proper classification of their waste streams.

14.0 TRANSPORT INFORMATION

The following transportation information is provided based on interpretation of shipping regulations. Each shipper is responsible for identifying, naming, marking and labeling prior to offering for transport.

USA (DOT) Status: Not regulated

Water (IMDG) Status: Not regulated

Air (ICAO, IATA) Status: Not regulated

Canada (TDG) Status: Not regulated

15.0 REGULATORY INFORMATION

This information listed in this section is not all inclusive of all regulation for this product or the chemical components of this product.

US Federal Regulations:

TSCA status: All known major components of this product are listed on the TSCA Inventory and/or are otherwise in compliance with TSCA


SARA 302 (EHS) Status: No EHS chemicals present.

SARA 311/312 Status: No hazards to Emergency Responders identified.

SARA 313 Status: *No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40CFR372 are present.

OSHA Status: This material meets the requirement of hazardous material and is subject to 29CFR1910.1200.

USA State Information

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California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

Pennsylvania, New Jersey, Massachusetts, and Rhode Island RTK

Status: This material contains chemicals subject to notification under these states Right To Know.

International Regulations

Canada DSL Status: All known major components of this product are listed on the DSL Inventory and/or are otherwise in compliance with the DSL

Canada WHMIS: N/A

EINECS Status: All components of this material are listed on the EINECS Inventory.

16.0 OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate, obtained from sources believed by Keystone Automotive to be accurate. As with all chemicals, KEEP AWAY FROM CHILDREN AND ANIMALS. FOR PROFESSIONAL USE ONLY. The hazard information contained herein is offered solely for the consideration of the user, subject to your own investigation and verification of compliance with applicable regulation, including the safe use of the product under every foreseeable condition.