

Material Safety Data Sheet

LA5786 Polyester resin 712-6684 (laminating no air d)

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: LA5786

Product Name: Polyester resin 712-6684 (laminating no air d)

Synonyms: 27528-00 982295 Chemical Family: None Known Application: For industrial use.

Distributed By: Univar Canada Ltd. 9800 Van Horne Way Richmond, BC V6X 1W5

Prepared By: The Safety, Health and Environment Department of Univar Canada Ltd.

Preparation date of MSDS: 03 June 2009 Telephone number of preparer: 1-866-686-4827

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COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percentage (W/W)	LD50s and LC50s Route & Species:
Styrene 100-42-5	30-60	Oral LD50 Rat : 2650 mg/kg Oral LD50 Mouse : 316 mg/kg Inhalation LC50 Rat : 12 gm/m³/4H Inhalation LC50 Mouse : 9500 mg/m³/4H Inhalation LC50 (Rat) 2800 ppm/4H

Note: No additional remark.

HAZARDS IDENTIFICATION

Potential Acute Health Effects: Eye Contact: Causes eye irritation.

Skin Contact: Causes skin irritation. Harmful if absorbed through the skin. Prolonged or repeated contact may cause skin sensitization.

Inhalation: Irritating to the nose, throat and respiratory tract. May cause central nervous system effects, such as headache, nausea, dizziness, confusion, breathing difficulties.

Ingestion: Harmful if swallowed. Abdominal discomfort, nausea and vomiting may occur. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion and breathing difficulties.

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4. FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate

Ingestion: Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Notes to Physician: Treatment based on sound judgment of physician and individual reactions of patient.

5. FIRE FIGHTING MEASURES

Flash Point: 30 °C / 86 °F

Flash Point Method: Setaflash. Closed cup. ASTM D3278

Autoignition Temperature: Not available. Flammable Limits in Air (%): Not Available.

Extinguishing Media: Use DRY chemicals, CO2, alcohol foam or water spray.

Special Exposure Hazards: Vapours may travel along ground and flashback along vapour trail may occur. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations. May form explosive peroxides. Fire or excessive heat may result in rupture of container due to polymerization. Heating may cause an explosion. USE WATER WITH CAUTION. Water may be ineffective in fighting the fire.

Hazardous Decomposition/Combustion Materials (under fire conditions): Oxides of carbon.

Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing

equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: HEALTH 2, FLAMMABILITY 3, INSTABILITY 1

HMIS RATINGS FOR THIS PRODUCT ARE: Not Available.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Consult local authorities.

Procedure for Clean Up: Isolate hazard area and restrict access. Stop leak only if safe to do so. Remove ignition sources and work with non-sparking tools. Small spills: soak up with absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. HANDLING AND STORAGE

Handling: For industrial use only. Handle and open containers with care. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. DO NOT handle or store near an open flame, heat, or other sources of ignition. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. DO NOT pressurize, cut, heat, or weld containers. Empty containers may contain hazardous product residues. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personnel protective equipment. Do not expose to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. If peroxide formation is suspected, do not open or move container. Addition of water or appropriate reducing materials will lessen peroxide formation.

Storage: Keep away from direct sunlight. Store in a cool, dry, well ventilated area, away from heat and ignition sources. Place away from incompatible materials. Store in accordance with good industrial practices.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use a NIOSH approved supplied air respirator.

Gloves:

Appropriate chemical resistant gloves should be worn.

Skin Protection: Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location

Ingredi	ents	Exposure Limit - ACGIH	Exposure Limit - OSHA	Immediately Dangerous to Life or Health - IDLH
Styre	ne	40 ppm STEL 20 ppm TLV-TWA	50 ppm TWA 215 mg/m³ TWA 100 ppm STEL 425 mg/m³ STEL	700 ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Viscous Liquid.

Colour: Blue

Odour: Styrene odour pH Not Available.

Specific Gravity: 1.08 @ 25°C Boiling Point: >64°C />147°F

Freezing/Melting Point: Not Available.
Vapour Pressure: Not Available.
Vapour Density: Not Available.
% Volatile by Volume: Not Available.
Evaporation Rate: Not Available.
Solubility: Negligible in water.

VOCs: Not Available. Viscosity: Not Available.

Molecular Weight: Not Available.

Other: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Hazardous polymerization may occur.

Hazardous Polymerization: May occur. Avoid initiators, heat, acids, extended storage period.

Conditions to Avoid: Keep away from heat, sparks and flame. Do not expose to air as this will accelerate peroxide

formation

Materials to Avoid: Oxidizing materials. Strong oxidizers. Metals. Strong acids.

Hazardous Decomposition Products: Not available.

Additional Information:

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

Ingestion: Harmful if swallowed. Abdominal discomfort, nausea and vomiting may occur. May cause central nervous system effects, such as headache, nausea, vomiting, abdominal pain, dizziness, confusion and breathing difficulties. **Skin Contact:** Causes skin irritation. Harmful if absorbed through the skin. Prolonged or repeated contact may cause skin sensitization.

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11. TOXICOLOGICAL INFORMATION

Inhalation: Irritating to the nose, throat and respiratory tract. May cause central nervous system effects, such as

headache, nausea, dizziness, confusion, breathing difficulties.

Eye Contact: Causes eye irritation.

Additional Information: Acute Test of Product:

Acute Oral LD50: Not Available.

Acute Dermal LD50: Not Available.

Acute Inhalation LC50: Not Available.

Carcinogenicity:

Ingredients	IARC - Carcinogens	ACGIH - Carcinogens
Styrene	Group 2B	A4 - Not Classifiable as a Human Carcinogen

Carcinogenicity Comment: Contains styrene. Possible cancer hazard - may cause cancer based on animal data.

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: For styrene - the limited information available indicates that styrene does not cause birth defects nor toxic effects to the human fetus. There have been several studies on rats and mice, none of which has demonstrated teratogenicity. Many of the studies were deficient in experimental design and reporting. However, embryotoxicity and fetotoxicity appear to be related to maternal toxicity. No adverse effects on the female reproductive system have been observed. In general, the few studies on the male reproductive system are not reliable because of factors such as poor reporting and exposure to other chemicals. Some reports have claimed an effect of styrene on testicular sperm morphology. However, the existing data do not support this claim. There is some evidence that high exposures to styrene can affect the male reproductive system. Chromosome damage in peripheral lymphocytes (white blood cells) and other cellular effects have been studied in workers. Both positive and negative results have been reported. Most of these studies are not reliable due to factors such as small sample size and exposures to other chemicals. A recent, comprehensive study analyzed chromosome aberrations, sister chromatid exchanges and micronuclei in peripheral lymphocytes. There were no effects on these parameters. Styrene has caused sister chromatid exchanges (SCE) in somatic cells. Styrene was not mutagenic in a mouse sperm morphology test. In general, it appears that styrene does not induce chromosome aberrations in mouse, rat or Chinese hamster bone marrow cells. In bacteria and in mammalian cell cultures, styrene is not mutagenic in in vitro assays without metabolic activation. Styrene is either weakly mutagenic or non- mutagenic with metabolic activation.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ingredients	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
Styrene	LC50 (Lepomis macrochirus) 25.05 mg/L LC50 (Pimephales promelas) 29 mg/L LC50 (Pimephales promelas) 4.02 mg/L		EC50 (Selenastrum capricornutum) 0.72 mg/L EC50 (Selenastrum capricornutum) 1.4 mg/L

Other Information:

No additional remark.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an approved waste management facility.

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14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: RESIN SOLUTION

DOT Hazardous Class 3 DOT UN Number: UN1866 DOT Packing Group: III

DOT Reportable Quantity (Ibs): Not Available.

Note: No additional remark. Marine Pollutant: No.

TDG (Canada):

TDG Shipping Name: RESIN SOLUTION

Hazard Class: 3 UN Number: UN1866 Packing Group: III

Note: No additional remark.

Marine Pollutant: No.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Note: Not available.

U.S. Regulatory Rules

Ingredients	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Styrene	Not Listed.	Listed	Listed

California Proposition 65: Listed.

MA Right to Know List: Listed.

New Jersey Right-to-Know List: Listed.
Pennsylvania Right to Know List: Listed.

WHMIS Hazardous Class:
B2 FLAMMABLE LIQUIDS
D2A VERY TOXIC MATERIALS
D2B TOXIC MATERIALS

F DANGEROUSLY REACTIVE MATERIAL



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16. OTHER INFORMATION

Additional Information:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Disclaimer:

NOTICE TO READER:

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

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END OF MSDS

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