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 * M S D S *
 *
 * Canadian Centre for Occupational Health and Safety *
 * * * * * (February, 2002) *

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 2919317
 PRODUCT NAME(S) : STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
 PRODUCT IDENTIFICATION : PRODUCT CODE: 02360
 DATE OF MSDS : 2001-07-16
 CURRENCY NOTE : This MSDS was provided to CCOHS in electronic form on
 2001-11-13

*** MANUFACTURER INFORMATION ***

MANUFACTURER : DOW CHEMICAL CANADA INC
 ADDRESS : Post Office Box 1012
 Sarnia Ontario
 Canada N7T 7K7
 Telephone: 519-339-5083
 EMERGENCY TELEPHONE NO. : 780-998-8282 (Fort Saskatchewan, Alberta)
 519-339-3711 (Sarnia, Ontario)
 514-652-1000 (Varenes, Quebec)

MANUFACTURER NOTE :
 For French translation of this data sheet, please contact Dow Chemical
 Canada Inc directly.

*** MATERIAL SAFETY DATA ***

M A T E R I A L S A F E T Y D A T A S H E E T PAGE: 1

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

IN CASE OF EMERGENCY: Fort Saskatchewan, Alberta: (780) 998-8282
 Sarnia, Ontario: (519) 339-3711
 Varenes, Quebec: (514) 652-1000

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN

Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

Dow Chemical Canada Inc.
 P.O. Box 1012, Sarnia, Ontario N7T 7K7

Prepared for use in Canada by the EH&S Product Regulatory Management
 Department; Phone (800) 331-6451

2. COMPOSITION/INFORMATION ON INGREDIENTS

Polystyrene	CAS# 009003-53-6	Balance
Chlorodifluoroethane	CAS# 000075-68-3	0-10%
Ethyl chloride	CAS# 000075-00-3	0-8%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

 * Blue rigid board. Odorless. No significant immediate hazards for *
 * emergency response are known. *
 *

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

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

SKIN: Mechanical injury only. Essentially nonirritating to skin. Skin absorption is unlikely due to physical properties.

INGESTION: Ingestion is unlikely due to physical state. Physical injury only.

INHALATION: Dust may cause irritation to upper respiratory tract.

(CONTINUED ON PAGE 2)

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M A T E R I A L S A F E T Y D A T A S H E E T

PAGE: 2

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
 Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

Excessive exposure to high concentrations of the ethyl chloride and chlorodifluoroethane blowing agents may cause central nervous system depression, anesthetic effects and irregular heartbeats (cardiac sensitization). In animals, excessive exposure to chlorodifluoroethane has caused low blood pressure, respiratory stimulation and tightness in the chest (bronchoconstriction). Concentrations of the above blowing agents anticipated incidental to proper handling are expected to be well below those which cause the acute inhalation effects, listed above, as well as below the OSHA PEL and Dow Industrial Hygiene Guide.

SYSTEMIC AND OTHER EFFECTS: Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

CANCER INFORMATION:

Neither chlorodifluoroethane nor dust from polystyrene foam products caused cancer in long-term animal studies. An increase in uterine tumors has been reported in female mice exposed for their lifetimes to 15,000 ppm of ethyl chloride. Such tumors did not occur in rats similarly exposed. These results are of unknown relevance to humans.

TERATOLOGY:

No birth defects were seen in animal studies with chlorodifluoroethane or ethyl chloride.

4. FIRST AID

EYE: Flush eyes with plenty of water; mechanical injury only.

SKIN: Wash off in flowing water or shower.

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

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
 Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

PROTECT PEOPLE: Clear non-emergency personnel from area.

PROTECT THE ENVIRONMENT: Avoid contamination of drinking water, natural water, ground water or any waterway.

CLEAN UP: Sweep up.

7. HANDLING AND STORAGE

HANDLING: Mechanical handling equipment can cause formation of dusts. Maintain good housekeeping. Layers of flammable dusts should not be permitted to accumulate.

STORAGE: Flammable vapors may accumulate in some storage situations. Storage, use and handling areas should be "No Smoking" areas. Limited industrial hygiene measurements of ethyl chloride in ventilated warehouses and production facilities indicate that ethyl chloride present in the air is below the current 150 ppm Industrial Hygiene Guide for ethyl chloride.

Gas fired recirculating air furnaces or heaters, gas water heaters, etc., drawing air from areas where there may be a presence of ethyl chloride, and chlorodifluoroethane gases from storage or fabrication of extruded polystyrene foam, can be subjected to rust and corrosion problems as a result of thermal decomposition of the blowing agents to hydrogen chloride.

NOTICE: This polystyrene foam plastic product is COMBUSTIBLE and should be protected from flame and other high heat sources. It should be installed with code-accepted thermal barriers or used in approved alternative constructions. For more information contact Dow (1-800-441-4369).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

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.

(CONTINUED ON PAGE 5)

(R) Indicates a trademark of The Dow Chemical Company

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE: 5

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
 Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

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

RESPIRATORY PROTECTION: In dusty atmospheres, use an approved

and positive in others.

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

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration is expected because of the relatively high molecular weight (MW greater than 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 photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY: Not expected to be acutely toxic.

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

(CONTINUED ON PAGE 7)

(R) Indicates a trademark of The Dow Chemical Company

M A T E R I A L S A F E T Y D A T A S H E E T

PAGE: 7

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

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. THE DOW CHEMICAL COMPANY 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 destruction device, and landfill.

As a service to its customers, Dow can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Dow's Customers Information Center at 800-258-2436 or 989-832-1556 for further details.

14. TRANSPORT INFORMATION

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

CANADIAN TDG INFORMATION: This product is not regulated by TDG when shipped domestically by land.

15. 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.

CANADIAN REGULATIONS

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(CONTINUED ON PAGE 8)

(R) Indicates a trademark of The Dow Chemical Company

M A T E R I A L S A F E T Y D A T A S H E E T PAGE: 8

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

REGULATORY INFORMATION: (CONTINUED)

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

This product is exempt under WHMIS.

U.S. REGULATIONS

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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
CHLOROETHANE (ETHYL CHLORIDE)	000075-00-3	<8 %
CHLORODIFLUOROETHANE	000075-68-3	<10 %

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) and is considered, under applicable definitions, to meet the following categories:

Exempt article

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

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

(CONTINUED ON PAGE 9)

(R) Indicates a trademark of The Dow Chemical Company

M A T E R I A L S A F E T Y D A T A S H E E T PAGE: 9

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
 Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

REGULATORY INFORMATION: (CONTINUED)

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: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

CHEMICAL NAME	CAS NUMBER	LIST
CHLOROETHANE (ETHYL CHLORIDE)	000075-00-3	NJ3 PA1 PA3
CHLORODIFLUOROETHANE	000075-68-3	NJ3 PA1 NJ2

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%).

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%).

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%).

PA3=Pennsylvania Environmental Hazardous Substance (present at greater than or equal to 1.0%).

OSHA HAZARD COMMUNICATION STANDARD:

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

16. OTHER INFORMATION

(Continued on page 10)

(R) Indicates a trademark of The Dow Chemical Company

M A T E R I A L S A F E T Y D A T A S H E E T PAGE: 10

Product: STYROFOAM* LWF EXTRUDED POLYSTYRENE BACKFILL FOAM CDN
 Product Code: 02360

Effective Date: 07/16/01 Date Printed: 11/08/01 MSD: 002706

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Health	0
Flammability	1
Reactivity	0

MSDS STATUS: Revised Section 2 and 15.

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