

SH/MS

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

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24-Hour Emergency Phone Number: 989-636-4400

Product: Primary Stripper A

Product Code: 50743

Effective Date: 09/08/03 Date Printed: 06/16/04 MSD: 005366

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Petroleum Solvent	CAS# 064742-94-5	67%
Dodecylbenzenesulfonic acid	CAS# 027176-87-0	33%
Naphthalene	CAS# 000091-20-3	<1%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

* Yellow to black liquid. Ester odor. Causes burns of the mouth *
* and throat. Aspiration hazard. Can enter lungs and cause damage. *
* Causes eye irritation. Prolonged exposure may cause skin burns. *
* May cause respiratory tract irritation. May cause central nervous *
* system effects. Can cause death of too much is breathed. Highly *
* toxic to fish and/or other aquatic organisms. Combustible liquid *
* and vapor. Toxic fumes may be released in fire situations. *

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

EYE: May cause moderate eye irritation. May cause moderate corneal injury. Effects may include discomfort or pain, and redness. Vapor may cause eye irritation experienced as mild discomfort and redness.

SKIN: Brief contact may cause skin irritation with local redness. Prolonged contact may cause skin burns. Symptoms may include pain, severe local redness, swelling and tissue damage. Repeated contact may cause drying or flaking of skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

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INGESTION: Low toxicity if swallowed. Swallowing may result in burns of the mouth and throat. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause serious injury, even death. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

INHALATION: Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause central nervous system effects. Excessive exposure may cause headache, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: No relevant information found.

CANCER INFORMATION: Contains naphthalene which has caused cancer in some laboratory animals. This mixture contains component(s) which are listed as potential carcinogens for hazard communication purposes under OSHA Standard 29 CFR 1910.1200. Component(s) listed by IARC: naphthalene.

TERATOLOGY (BIRTH DEFECTS): Contains component(s) which, in lab animals, have been toxic to the fetus only at doses toxic to the mother. The component(s) is/are the sodium salt of the dodecylbenzene sulfonic acid. Contains component(s) which did not cause birth defects or any other fetal effects in lab animals. The component(s) is/are the petroleum solvent.

REPRODUCTIVE EFFECTS: No relevant information found.

4. FIRST AID

EYE: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

SKIN: Wash skin with plenty of water.

INGESTION: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

INHALATION: Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen

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should be administered by qualified personnel. Call a physician or transport to a medical facility.

NOTE TO PHYSICIAN: The decision of whether to induce vomiting or not should be made by a physician. Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach & lower GI tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. If burn is present, treat as any thermal burn, after decontamination. Excessive exposure may aggravate pre-existing asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome). Skin contact may aggravate pre-existing dermatitis. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 200F, 93.3C

METHOD USED: Open cup

AUTOIGNITION TEMPERATURE: Not determined

FLAMMABILITY LIMITS

LFL: Not determined

UFL: Not determined

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: sulfur oxides, carbon monoxide, carbon dioxide.

OTHER FLAMMABILITY INFORMATION: Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

EXTINGUISHING MEDIA: Water fog or fine spray, dry chemical fire extinguishers, carbon dioxide fire extinguishers and foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area

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and deny unnecessary entry. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this MSDS.

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). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant clothing with SCBA. If this is not available, wear full chemical resistant clothing with SCBA and fight fire from a remote location. For protective equipment in post-fire or non-fire clean up situations, refer to the relevant sections.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Ventilate area of leak or spill. Refer to Section 7, Handling for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls/Personal Protection.

PROTECT THE ENVIRONMENT: Spills or discharge to natural waterways is likely to kill aquatic organisms. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

CLEANUP: Small spills: absorb with material such as paper or sawdust. Large spills: contain spilled material if possible. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations for additional information.

7. HANDLING AND STORAGE

HANDLING: Do not swallow. Avoid contact with eyes, skin or clothing. Avoid breathing vapor. Wash thoroughly after handling. Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. Do not cut or weld container. Spills of these organic materials on hot

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fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

STORAGE: Store in original container. Store in a dry place. Store away from direct sunlight. Store between 50F to 90F. See Section 10 for more specific information.

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 chemical goggles. If exposure causes eye discomfort, use a full-face respirator.

SKIN PROTECTION: Use protective clothing chemically resistant to this material. Selection of specific items such as face-shield, gloves, boots, apron, or full body suit will depend on operation.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use an approved air-purifying or positive-pressure supplied-air respirator, depending on the potential airborne concentration. For emergency and other conditions where the exposure guideline may be exceeded, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

EXPOSURE GUIDELINES: Naphthalene: ACGIH TLV is 10 ppm TWA, 15 ppm STEL, Skin, A4. OSHA PEL is 10 ppm TWA.

A "skin" notation following the exposure guideline refers to the potential for dermal absorption of the material including mucous membranes and the eyes either by contact with vapors or by direct skin contact. 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.

The manufacturer recommends the following occupational exposure limits: a TWA of 100 mg/m³ (15 ppm) based on total hydrocarbon.

9. PHYSICAL AND CHEMICAL PROPERTIES

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APPEARANCE/PHYSICAL STATE: Yellow to black liquid
ODOR: Ester
VAPOR PRESSURE: Not determined
VAPOR DENSITY: Not determined
BOILING POINT: 280 deg F - 400 deg F
SOLUBILITY IN WATER/MISCIBILITY: Emulsion
SPECIFIC GRAVITY OR DENSITY: 0.9 -1.0

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Thermally stable at typical use temperatures.

CONDITIONS TO AVOID: Exposure to elevated temperatures can cause product to decompose.

INCOMPATIBILITY WITH OTHER MATERIALS: Avoid contact with strong acids, strong bases and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: carbon monoxide, carbon dioxide, sulfur oxides.

HAZARDOUS POLYMERIZATION: Will not occur.

11. 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)

SKIN: The dermal LD50 has not been determined.

INGESTION: Single dose oral LD50 has not been determined.

MUTAGENICITY: For petroleum solvent: in vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

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

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: Based largely or completely on information for Aromatic 200: bioconcentration potential is high (BCF >3000 or Log Pow between 5 and 7). Based largely

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or completely on information for sodium dodecyl benzene sulfonate: no bioconcentration is expected because of the relatively high water solubility.

DEGRADATION & PERSISTANCE: Based largely or completely on information for Aromatic 200: biodegradation may occur under aerobic conditions (in the presence of oxygen). Based largely or completely on information for sodium dodecyl benzene sulfonate: material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

ECOTOXICITY: Based largely or completely on information for Aromatic 200: material is highly toxic to aquatic organisms on an acute basis (LC50 or EC50 between 0.1 and 1 mg/L in the most sensitive species tested). Based largely or completely on information for sodium dodecyl benzene sulfonate: material is moderately toxic to aquatic organisms on an acute basis (LC50 or EC50 between 1 and 10 mg/L in the most sensitive species tested).

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

DISPOSAL METHOD: 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 regulation. 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 SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED OR UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted recycler, reclaimer, incinerator or other thermal destruction device.

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 Customer Information Center at 800-258-2436 or 989-832-1556 for further details.

14. TRANSPORT INFORMATION

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DEPARTMENT OF TRANSPORTATION (DOT): For regulatory information if required, consult transportation regulations, product shipping papers, or contact your Dow representative.

CANADIAN TDG INFORMATION: For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or contact your Dow representative.

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.

U.S. REGULATIONS

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SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

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:

An immediate health hazard
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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REGULATORY INFORMATION (CONTINUED)

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

NAPHTHALENE

CAS# 000091-20-3

<1%

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
NAPHTHALENE	000091-20-3	PA1 PA3
BENZENESULFONIC ACID, DODECYL-	027176-87-0	PA1 PA3

NJ1=New Jersey Special Health Hazard Substance (present at greater than or equal to 0.1%).

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 a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CANADIAN REGULATIONS

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WHMIS INFORMATION: The Canadian Workplace Hazardous Materials

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REGULATORY INFORMATION (CONTINUED)

Information System (WHMIS) Classification for this product is:

D2A - untested mixture containing a material qualifying as D2A
D2B - eye or skin irritant
Refer elsewhere in the MSDS for specific warnings and
safe handling information. Refer to the employer's
workplace education program.

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CPR STATEMENT: 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.

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HAZARDOUS PRODUCTS ACT INFORMATION: This product contains the following
ingredients which are Controlled Products and/or on the Ingredient
Disclosure List (Canadian HPA section 13 and 14):

COMPONENTS:	CAS #	AMOUNT (%w/w)
Petroleum solvent	CAS# 064742-94-5	67%
Dodecylbenzenesulfonic acid	CAS# 027176-87-0	33%

CAS#	LD50 Oral mg/kg	LD50 Dermal mg/kg	LC50 Inhal. ppm
064742-94-5	>5000 rat	>3160 rabbit	>6 mg/L
027176-87-0	>500 rat	N/AV	N/AV

16. OTHER INFORMATION

REVISION INDICATOR: Revised sections 2,3,4,5,6,7,8,9,10,11,12,15.

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The Information Herein Is Given In Good Faith, But No Warranty,
Express Or Implied, Is Made. Consult The Dow Chemical Company
For Further Information.