The Dow Chemical Company encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. Product and Company Identification

Product Name
Primary Stripper A

COMPANY IDENTIFICATION
The Dow Chemical Company
2030 Willard H. Dow Center
Midland, MI 48674
USA

Prepared By: Prepared for use in Canada by EH&S, Product Regulatory Management Department.
450-652-1029
Revision 2005.09.01
Print Date: 6/15/2007

Customer Information Number: 800-258-2436

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 989-636-4400

2. Hazards Identification

Emergency Overview
Color: Brown to black
Physical State: Liquid
Odor: Pungent

WARNING! Causes eye irritation. Prolonged exposure may cause skin burns. May cause respiratory tract irritation. May cause central nervous system effects. May cause anesthetic effects. Aspiration hazard. Can enter lungs and cause damage. Highly toxic to fish and/or other aquatic organisms. Isolate area. Keep upwind of spill. Toxic fumes may be released in fire situations.

* Indicates a Trademark
Potential Health Effects
Eye Contact: May cause moderate eye irritation. May cause moderate corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. Effects may include discomfort or pain, and redness.

Skin Contact: 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. May cause drying and flaking of the skin.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

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.

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of 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. Swallowing may result in irritation or burns of the mouth, throat, and gastrointestinal tract.

Cancer Information: Contains naphthalene which has caused cancer in some laboratory animals.

Birth Defects/Developmental Effects: Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother.

### 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Amount W/W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy aromatic naphtha</td>
<td>64742-94-5</td>
<td>67.0 %</td>
</tr>
<tr>
<td>Dodecylbenzene sulphonic acid</td>
<td>27176-87-0</td>
<td>33.0 %</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt; 1.0 %</td>
</tr>
</tbody>
</table>

Amounts are presented as percentages by weight.

### 4. First-aid measures

Eye Contact: 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 Contact: Wash skin with plenty of water.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

Ingestion: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately. Seek medical attention immediately.

Notes 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 and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. Maintain adequate ventilation and oxygenation of the patient. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

Medical Conditions Aggravated by Exposure: Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome). Skin contact may aggravate preexisting dermatitis.
5. Fire Fighting Measures

**Extinguishing Media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. 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 Procedures:** Keep people away. Isolate fire 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 (M) SDS.

**Special Protective Equipment for Firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

**Unusual Fire and Explosion Hazards:** Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

**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.

See Section 9 for related Physical Properties

6. Accidental Release Measures

**Steps to be Taken if Material is Released or Spilled:** Small spills: Absorb with materials such as: Paper. Sawdust. Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

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

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

7. Handling and Storage

**Handling**

**General Handling:** Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Do not swallow. Wash thoroughly after handling. Use with adequate ventilation. Keep container closed. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

**Storage**

Store in original container. Store in a dry place. Store away from direct sunlight. See Section 10 for more specific information.

**Storage temperature:**

10 - 32 °C
8. Exposure Controls / Personal Protection

Exposure Limits

<table>
<thead>
<tr>
<th>Component</th>
<th>List</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>OEL (QUE)</td>
<td>TWA</td>
<td>52 mg/m3 10 ppm</td>
</tr>
<tr>
<td></td>
<td>OEL (QUE)</td>
<td>STEL</td>
<td>79 mg/m3 15 ppm</td>
</tr>
<tr>
<td></td>
<td>CAD AB OEL</td>
<td>TWA</td>
<td>52 mg/m3 10 ppm  SKIN</td>
</tr>
<tr>
<td></td>
<td>CAD AB OEL</td>
<td>STEL</td>
<td>79 mg/m3 15 ppm  SKIN</td>
</tr>
<tr>
<td></td>
<td>CAD BC OEL</td>
<td>TWA</td>
<td>10 ppm  SKIN</td>
</tr>
<tr>
<td></td>
<td>CAD BC OEL</td>
<td>STEL</td>
<td>15 ppm  SKIN</td>
</tr>
<tr>
<td></td>
<td>CAD ON OEL</td>
<td>TWA</td>
<td>52 mg/m3 10 ppm</td>
</tr>
<tr>
<td></td>
<td>CAD ON OEL</td>
<td>STEL</td>
<td>78 mg/m3 15 ppm</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>TWA</td>
<td>10 ppm  SKIN</td>
</tr>
<tr>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>15 ppm  SKIN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>10 ppm  SKIN</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>15 ppm  SKIN</td>
</tr>
</tbody>
</table>

Consult local authorities for recommended exposure limits.

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.

Personal Protection

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, boots, apron, or full body suit will depend on the task.

   Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Viton, Polyethylene, Polyvinyl chloride ("PVC" or "vinyl"), Styrene/butadiene rubber, Polyvinyl alcohol ("PVA"), Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Butyl rubber, Neoprene, Chlorinated polyethylene, Natural rubber ("latex"), Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

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 conditions, use an approved positive-pressure self-contained breathing apparatus. The following should be effective types of air-purifying respirators: Organic vapor cartridge.

Ingestion: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

Engineering Controls

Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Lethal concentrations may exist in areas with poor ventilation.

9. Physical and Chemical Properties

Physical State: Liquid
Color: Brown to black
10. Stability and Reactivity

Stability/Instability
Thermally stable at typical use temperatures.

Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose.

Incompatible Materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers. Corrosive when wet. Flammable hydrogen may be generated from contact with metals such as: Aluminum. Copper.

Hazardous Polymerization
Will not occur.

Thermal Decomposition
Decomposition products depend upon temperature, air supply and the presence of other materials.

11. Toxicological Information

Acute Toxicity
Ingestion
Single dose oral LD50 has not been determined.

Skin Absorption
The dermal LD50 has not been determined.

Chronic Toxicity and Carcinogenicity
Contains naphthalene which has caused cancer in some laboratory animals.

Developmental Toxicity
Contains component(s) which, in laboratory animals, have been toxic to the fetus only at doses toxic to the mother. Contains component(s) which did not cause birth defects or any other fetal effects in lab animals.

Genetic Toxicology
Contains a component(s) which was negative in In Vitro genetic toxicity studies. Contains component(s) which were negative in some animal genetic toxicity studies and positive in others.

Component Toxicology - Naphthalene

<table>
<thead>
<tr>
<th>Skin Absorption</th>
<th>LD50, Rabbit &gt; 2,500 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Toxicology - Dodecylbenzene sulphonic acid</td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td>Estimated LD50, Rat 650 - 2,000 mg/kg</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Estimated LD50, Mouse 2,000 mg/kg</td>
</tr>
<tr>
<td>Component Toxicology - Naphthalene</td>
<td></td>
</tr>
<tr>
<td>Ingestion</td>
<td>LD50, Rat 490 - 1,800 mg/kg</td>
</tr>
</tbody>
</table>
Ingestion

| Approximate. Lethal Dose, Human 5 - 15 grams |

12. Ecological Information

CHEMICAL FATE

Movement & Partitioning
For the major component(s): Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7). For the minor component(s): No bioconcentration is expected because of the relatively high water solubility.

Persistence and Degradability
For the major component(s): Biodegradation may occur under aerobic conditions (in the presence of oxygen). For the minor component(s): Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

ECOTOXICITY
For the major component(s): Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested). For the minor component(s): Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested).

13. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices 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. DOW 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: Composition Information. FOR UNUSED & 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 Group at 1-800-258-2436 or 1-989-832-1556 (U.S.), or 1-800-331-6451 (Canada) for further details.

14. Transport Information

TDG Small container
Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, NOS
Technical Name: DODECYLBENZENESULFONIC ACID
Hazard Class: 8  ID Number: UN3265  Packing Group: PG III

TDG Large container
Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name: DODECYLBENZENESULFONIC ACID
Hazard Class: 8  ID Number: UN3265  Packing Group: PG III
IMDG
Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name: DODECYLBENZENESULFONIC ACID
Hazard Class: 8  ID Number: UN3265  Packing Group: PG III
EMS Number: F-A,S-B

ICAO/IATA
Proper Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.
Technical Name: DODECYLBENZENESULFONIC ACID
Hazard Class: 8  ID Number: UN3265  Packing Group: PG III
Cargo Packing Instruction: 820
Passenger Packing Instruction: 818

15. Regulatory Information

US. Toxic Substances Control Act
All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

European Inventory of Existing Commercial Chemical Substances (EINECS)
This product is on the EINECS inventory.

Hazardous Products Act Information: CPR Compliance
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.

Hazardous Products Act Information: WHMIS Classification

<table>
<thead>
<tr>
<th>Hazard</th>
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<tbody>
<tr>
<td>D2A</td>
<td>Possible, Probable or Known Human Carcinogen According to Classifications By IARC or ACGIH</td>
</tr>
<tr>
<td>D2B</td>
<td>Eye or Skin Irritant</td>
</tr>
</tbody>
</table>

Hazardous Products Act Information: Hazardous Ingredients
This product contains the following ingredients which are Controlled Products and/or are on the Ingredient Disclosure List (Canadian HPA Section 13 and 14).

<table>
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<td>91-20-3</td>
<td>&gt;= 0.1 - &lt;= 1.0 %</td>
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16. Other Information

Recommended Uses and Restrictions
Stripper of polymer layers.

Revision
Identification Number: 50838 / 1001 / Issue Date 2005.09.01 / Version: 1.2
Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>N/A</td>
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</tr>
<tr>
<td>W/W</td>
<td>Weight/Weight</td>
</tr>
<tr>
<td>OEL</td>
<td>Occupational Exposure Limit</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure Limit</td>
</tr>
</tbody>
</table>
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