

DOW CHEMICAL U.S.A. -- 03386, BRAKE FLUID 1000

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MSDS Safety Information
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FSC: 9150
NIIN: 01-052-6762
MSDS Date: 03/10/1999
MSDS Num: CLMPY
Product ID: 03386, BRAKE FLUID 1000
MFN: 02
Responsible Party
Cage: 71983
Name: DOW CHEMICAL U.S.A.
City: MIDLAND MI 48674
Info Phone Number: 800-258-24
36
Emergency Phone Number: 517-636-4400
Resp. Party Other MSDS No.: 002266

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Item Description Information
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Item Manager: S9G
Item Name: BRAKE FLUID,AUTOMOTIVE
Specification Number: VV-B-680
Type/Grade/Class: 1 SIZE
Unit of Issue: QT
UI Container Qty: 0
Type of Container: PPP-C-96

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Ingredients
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Name: *** PROPRIETARY ***

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Health Hazards Data
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LD50 LC50 Mixture: LD50 (ORAL, RAT) > 2,000 MG/KG
Carcinogenicity Inds - NTP: NO
IARC: NO
OSHA: NO
Effects of Exposure: EYE: MAY CAUSE MODERATE IRRITATION, CORNEAL INJURY. SKIN:
PROLONGED/REPEATED EXPOSURE MAY CAUSE IRRITATION. MAY BE ABRADED THROUGH
SKIN. PROLONGED/REPEATED CONTACT W

WITH VERY LARGE AMOUNTS OF COMPONENTS MAY CAUSE NARCOSIS (DROWSINESS). MASSIVE CONTACT WITH DAMAGED SKIN/OF MATERIAL SUFFICIENTLY HOT TO BURN SKIN MAY RESULT IN ABSORPTION OF LETHAL AMOUNTS. INGESTION: SINGLE DOSE ORAL TOXICITY IS LOW . SMALL AMOUNTS SWALLOWED INCIDENTALLY NOT LIKELY TO CAUSE INJURY; SWALLOWING LARGE AMOUNTS MAY CAUSE INJURY. INHALATION: AT ROOM TEMPERATURES, VAPORS ARE MINIMAL DUE TO PHYSICAL PROPERTIES; A SINGLE EXPOSURE IS NOT LIKELY TO BE HAZARDOUS.

Explanation of

of Carcinogenicity: NO RELEVANT INFORMATION FOUND FOR MAJOR COMPONENTS. CONTAINS COMPONENT(S) WHICH DID NOT CAUSE CANCER IN LABORATORY ANIMALS

Signs And Symptoms Of Overexposure: EYE: MAY CAUSE MODERATE IRRITATION. SKIN: PROLONGED/REPEATED EXPOSURE MAY CAUSE IRRITATION. PROLONGED/REPEATED CONTACT

WITH VERY LARGE AMOUNTS OF COMPONENTS MAY CAUSE NARCOSIS (DROWSINESS). MASSIVE CONTACT WITH DAMAGED SKIN/OF MATERIAL SUFFICIENTLY HOT TO BURN SKIN MAY RESULT IN ABSORPTION OF LETHAL AMOUNT

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Medical Condition Aggravated By Exposure: NOT PROVIDED

First Aid: EYE: IRRIGATE WITH FLOWING WATER IMMEDIATELY AND CONTINUOUSLY FOR 15 MINUTES. CONSULT MEDICAL PERSONNEL. SKIN: WASH OFF IN FLOWING WATER OR SHOWER. INGESTION: IF SWALLOWED, SEEK MEDICAL ATTENTION. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL. INHALATION: REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN.

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Handling and Disposal
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Spill Release Procedures: PROTECT PEOPLE: ISOLATE AREA. PROTECT THE ENVIRONMENT: CONTAIN LIQUID TO PREVENT CONTAMINATION OF SOIL, SURFACE WATER OR GROUND WATER. CLEANUP: CLEAN UP WITH ABSORBENT MATERIAL. COLLECT MATERIAL IN SUITABLE AND PROPERLY LABELED OPEN CONTAINERS.

Neutralizing Agent: NOT RELEVANT

Waste Disposal Methods: 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.

Handling And Storage Precautions: WHEN HANDLING HOT MATERIAL, PROTECT SKIN FROM THERMAL BURNS AS WELL AS FROM SKIN ABSORPTION.

Other Precautions: NOT PROVIDED

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Fire and Explosion Hazard Information
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Flash Point Method: PMCC

Flash Point: =133.3C, 272.F

Autoignition Temp Text: N/D

Lower Limits: N/D

Upper Limits: N/D

Extinguishing Media: WATER FOG/FINE SPRAY, CARBON DIOXIDE, DRY CHEMICAL, FOAM. ALCOHOL RESISTANT FOAMS (ATC TYPE) ARE PREFERRED IF AVAILABLE. GENERAL PURPOSE SYNTHETIC FOAMS MAY WORK.

Fire Fighting Procedures: KEEP PEOPLE AWAY. ISOLATE FIRE AREA AND DENY UNNECESSARY ENTRY. BURNING LIQUIDS MAY BE MOVED BY FLUSHING WITH WATER TO PROTE

CT PERSONNEL AND MINIMIZE PROPERTY DAMAGE. BURNING LIQUIDS MAY BE EXTINGUISH ED BY DILUTION WITH WATER. DO NOT USE DIRECT WATER STREAM. MAY SPREAD FIRE.

Unusual Fire/Explosion Hazard: VIOLENT STEAM GENERATION OR ERUPTION MAY OCCUR UPON APPLICATION OF DIRECT WATER STREAM TO HOT LIQUIDS. SPILLS OF THESE ORGANIC LIQUIDS ON HOT FIBROUS INSULATIONS MAY LEAD TO LOWERING OF THE AUTOIGNITI ON TEMPERATURES POSSIBLY RESULTING IN SPONTANEOUS COMBUSTION.

Control Measures

Respiratory Protection: NO RESPIRATORY PROTECTION SHOULD BE NEEDED. IF RESPIRATORY IRRITATION IS EXPERIENCED, USE AN APPROVED AIR-PURIFYING RESPIRATOR.

Ventilation: GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT FOR MOST CONDITIONS. LOCAL EXHAUST VENTILATION MAY BE NECESSARY FOR SOME OPERATIONS.

Protective Gloves: IMPERIVOUS GLOVES

Eye Protection: USE CHEMICAL GOGGLES, FACESHIELD

Other Protective Equipmen

t: SELECTION OF SPECIFIC ITEMS SUCH AS FACESHIELD, GLOVES, BOOTS, APRON, OR FULL-BODY SUIT WILL DEPEND ON OPERATION.

Work Hygienic Practices: NOT PROVIDED

Supplemental Safety and Health: ABBREVIATION: N/A = NOT APPLICABLE. N/AV = NOT AVAILABLE. N/K = UNKNOWN. N/P = NOT PROVIDED. N/R = NOT RELEVANT. N/D = NOT DETERMINED. N/E = NOT ESTABLISHED. CNS = CENTRAL NERVOUS SYSTEM. GI = GASTROI NTESTINAL. SCBA = SELF CONTAINED BREATHING APPARATUS.

Physical/Chemical Properties

HCC: V6

NRC/State LIC No: NOT RELEVANT

Boiling Point: =221.1C, 430.F

B.P. Text: MINIMUM

M.P/F.P Text: NOT PROVIDED

Decomp Text: NOT PROVIDED

Vapor Pres: LOW

Vapor Density: N/D

Spec Gravity: 1.03

PH: NOT PROVIDED

Viscosity: NOT PROVIDED

Evaporation Rate & Reference: NOT PROVIDED

Solubility in Water: INFINITE

Appearance and Odor: LIGHT YELLOW LIQUID. MILD ODOR

Percent Volatiles by Volume: NOT PROVIDED

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Corrosion Rate: NOT PROVIDED

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Reactivity Data
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Stability Indicator: YES

Stability Condition To Avoid: ACTIVE INGREDIENT DECOMPOSES AT ELEVATED TEMPERATURES. PRODUCT CAN DECOMPOSE AT ELEVATED TEMPERATURES.

Materials To Avoid: AVOID CONTACT WITH OXIDIZING MATERIALS.

Hazardous Decomposition Products: SMOKE, UNIDENTIFIED TOXIC AND/ OR IRRITATING COMPOUNDS. HAZARDOUS COMBUSTION PRODUCTS MAY INCLUDE AND ARE NOT LIMITED TO:

CARBON MONOXIDE, CARBON DIOXIDE.

Hazardous Polymerization Indicator: YES

Conditions To Avoid Polymerization: NONE
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Toxicological Information
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Toxicological Information: SKIN: THE DERMAL LD50 HAS NOT BEEN DETERMINED.

INGESTION: THE ORAL LD50 FOR RATS IS EXPECTED TO BE >2000 MG/ KG.

MUTAGENICITY: IN VITRO MUTAGENICITY STUDIES WERE NEGATIVE FOR COMPONENT(S)

TESTED. MUTAGENICITY STUDIES IN ANIMALS WERE NEGATIVE FOR COMPONENT(S) TESTED.
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Ecological Information
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Ecological: BIOCONCENTRATION POTENTIAL IS LOW (BCF LESS THAN 100 OR LOG POW LESS THAN 3). POTENTIAL FOR MOBILITY IN SOIL IS VERY HIGH (KOC BETWEEN 0 AND 50). DEGRADATION & PERSISTENCE: BASED ON INFORMATION FOR TRIETHYLENE GLYCOL, AND DOWANOL DPM, TMH A

AND TBH. BIODEGRADATION UNDER AEROBIC STATIC

LABORATORY CONDITIONS IS MODERATE (BOD20 OR BOD28/ THOD BETWEEN 10 AND 40%).

BASED ON INFORMATION FOR REMAINING COMPONENTS. BIODEGRADATION UNDER AEROBIC STATIC LABORATORY CONDITIONS IS HIGH (BOD20 OR BOD28/ THOD GREATER THAN 40%). ECOTOXICITY: MATERIAL IS PRACTICALLY NON- TOXIC TO AQUATIC ORGANISMS.
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MSDS Transport Information
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Transport Information:

DEPARTMENT OF TRANSPORTATION (D. O. T.): FOR DOT REGULATORY INFORMATION, IF REQUIRED, CONSULT TRANSPORTATION REGULATIONS, PRODUCT SHIPPING OR CONTACT YOUR DOW REPRESENTATIVE.
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Regulatory Information
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SARA Title III Information: 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----- GLYCOL ETHERS PROPRIETARY <100 % --- SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED ACCORDING TO THE EPA "HAZARD CATEGORIES" PRO MULGATED UNDER SECTIONS 311 AND 312IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: AN IMMEDIATE HEALTH HAZARD A DELAYED HEALTH HAZARD.

Federal Regulatory Information: TOXIC SUBSTANCES CO

NTROL ACT (TSCA): ALL

INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY. OSHA HAZARD COMMUNICATION STANDARD: THIS PRODUCT IS A "HAZARDOUS CHEMICAL" AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200.

State Regulatory Information: 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 NA

ME CAS N UMBER LIST -----

----- PROPRIETARY INGREDIENT PROPRIETARY X X =THIS PRODUCT CONTAINS PROPRIETARY INGREDIENT(S) LISTED BY ONE OR MORE STATES.

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Other Information

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Other Information: NOTE TO PHYSICIAN: NO SPECIFIC ANTIDOTE. 4- METHYL PYRAZOLE IS AN EFFECTIVE BLOCKER OF ALCOHOL DEHYDROGENASE AND IS AVAILABLE NOW AS FOMEPIZOLE (ANTIZOL) (R) AND SHOULD BE USED IN THE TREATMENT OF E THYLENE GLYCOL, DIETHYLENE GLYCOL AND METHANOL INTOXICATION IF AVAILABLE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTIONS OF THE PATIENT.

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Transportation Information

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Responsible Party Cage: 71983
Trans ID NO: 159059
Product ID: 03386, BRAKE FLUID 1000
MSDS Prepared Date:
03/10/1999
Review Date: 09/27/2001
MFN: 2
Net Unit Weight: 1 QT
Multiple KIT Number: 0
Unit Of Issue: QT
Container QTY: 0
Type Of Container: PPP-C-96

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Detail DOT Information

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DOT PSN Code: ZZZ
DOT Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

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Detail IMO Information

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IMO PSN Code: ZZZ

IMO Proper Shipping Name: NOT REGULATED FOR THIS MODE OF TRANSPORTATION

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Detail IATA Information

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IATA PSN Code: ZZZ

IATA Proper Shipping Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

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Detail AFI Information

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AFI PSN Code: ZZZ

AFI Proper Shippi

ng Name: NOT REGULATED BY THIS MODE OF TRANSPORTATION

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HAZCOM Label

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Product ID: 03386, BRAKE FLUID 1000

Cage: 71983

Company Name: DOW CHEMICAL U.S.A.

City: MIDLAND MI

Zipcode: 48674

Health Emergency Phone: 517-636-4400

Label Required IND: Y

Date Of Label Review: 09/27/2001

Status Code: A

Year Procured: 2001

Origination Code: F

Eye Protection IND: YES

Skin Protection IND: YES

Signal Wor

d: CAUTION

Health Hazard: Slight

Contact Hazard: Slight

Fire Hazard: Slight

Reactivity Hazard: None

Hazard And Precautions: MAY CAUSE IRRITATION OF EYES AND SKIN. INGESTION:

SINGLE DOSE ORAL TOXICITY IS LOW. SWALLOWING LARGE AMOUNTS MAY CAUSE INJURY.

INHALATION: A SINGLE EXPOSURE IS NOT LIKELY TO BE HAZARDOUS. FIRST AID: EYE:

IRRIGATE WITH FLOWING WATER FOR 15 MINUTES. CONSULT MEDICAL PERSONNEL. SKIN:

WASH WITH SOAP & WATER. INGESTION: IF SWALLOWED, SEEK MEDICAL ATTENTION.

DO NOT I

INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL.

INHALATION: REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN.

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