

MASTER AUTOM GROUP -- FADE FREE BRAKE FLUID
MATERIAL SAFETY DATA SHEET
NSN: 915000N082420
Manufacturer's CAGE: MAAUT
Part No. Indicator: A
Part Number/Trade Name: FADE FREE BRAKE FLUID

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General Information

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Company's Name: MASTER AUTOM GROUP
Company's P. O. Box: 381900
Company's City: GERMANTOWN
Company's State: TN
Company's Country: US
Company's Zip Code: 38138-1190
Company's Emerg Ph #: 901-755-6677;800-255-3924
Company's Info Ph #: 901-755-6677
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SMJ
Date MSDS Prepared: 07JUL94
Safety Data Review Date: 23JAN98
MSDS Serial Number: CGNWS

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Ingredients/Identity Information

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Proprietary: NO
Ingredient: DIETHYLENE GLYCOL
Ingredient Sequence Number: 01
Percent: 10
NIOSH (RTECS) Number: ID5950000
CAS Number: 111-46-6
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Proprietary: NO
Ingredient: ETHANOL, 2-(2-ETHOXYETHOXY)-; (DIETHYLENE GLYCOL MONO ETHYL ETHER)
Ingredient Sequence Number: 02
Percent: 10
NIOSH (RTECS) Number: KK8750000
CAS Number: 111-90-0
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Proprietary: NO
Ingredient: ETHANOL, 2-(2-(2-ETHOXYETHOXY)ETHOXY)-; (TRIETHYLENE GLYCOL MONOETHYL ETHER)
Ingredient Sequence Number: 03
Percent: 20
NIOSH (RTECS) Number: KK8950000
CAS Number: 112-50-5
OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)

Proprietary: NO

Ingredient: ETHANOL, 2-(2-BUTOXYETHOXY)-; (DIETHYLENE GLYCOL MONO BUTYL ETHER)

Ingredient Sequence Number: 04

Percent: 10

NIOSH (RTECS) Number: KJ9100000

CAS Number: 112-34-5

OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)

Proprietary: NO

Ingredient: ETHANOL, 2-(2-(2-BUTOXYETHOXY)ETHOXY)-; (TRIETHYLENE GLYCOL MONO BUTYL ETHER)

Ingredient Sequence Number: 05

Percent: 20

NIOSH (RTECS) Number: KJ9450000

CAS Number: 143-22-6

OSHA PEL: N/K (FP N)

ACGIH TLV: N/K (FP N)

Proprietary: NO

Ingredient: EFTS OF OVEREXPOS: TRACT & LUNGS; SINGLE BRIEF EXPOS TO FORMIC

ACID MAY CAUSE ADVERSE EFTS. SYSTEMIC EFTS: (ING 7)

Ingredient Sequence Number: 06

NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 6: EXCESSIVE EXPOS MAY CAUSE IRRIT TO UPPER RESP TRACT. OBSERVATIONS IN ANIMALS INCL KIDNEY & LIVER EFTS & (ING 8)

Ingredient Sequence Number: 07

NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 7: DEPOSITION OF CALCIUM SALTS IN VARIOUS TISS AFTER LONG-

TERM DIETARY INTAKE OF ETHYLENE GLYCOL. (ING 9)

Ingredient Sequence Number: 08

NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

Proprietary: NO

Ingredient: ING 8: OBSERVATIONS IN ANIMAL INCL FORMATION OF BLADDER STONES

AFTER RPTD ORAL DOSES OF DIETHYLENE GLYCOL. RPTD (ING 10)

Ingredient Sequence Number: 09

NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 9: EXCESSIVE EXPOS TO FORMIC ACID MAY CAUSE KIDNEY EFTS.
TERATOLOGY: BASED ON ANIMAL STUDIES, INGEST OF VERY(ING 11)
Ingredient Sequence Number: 10
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 10: LG AMTS OF ETHYLENE GLYCOL APPEARS TO BE MAJOR & POSS
ONLY RTE OF EXPOS TO PROD BIRTH DEFECTS. EXPOS BY (ING 12)
Ingredient Sequence Number: 11
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 11: INHAL(TESTED NOSE-ONLY IN ANIMALS TO PVNT INGEST)/SKIN
CONT PRIMARY RTES OF OCCUP EXPOS, HAD MIN/ESSNTLY(ING 13)
Ingredient Sequence Number: 12
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 12: NO EFT ON FETUS. BIRTH DEFECTS ARE UNLIKELY FROM EXPOS
TO DIETHYLENE GLYCOL. EXPOS HAVING NO ADVERSE (ING 14)
Ingredient Sequence Number: 13
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 13: EFTS ON MOTHER SHOULD HAVE NO EFT ON FETUS. REPRO EFTS: IN MICE STUDIES, ETHYLENE GLYCOL IN LG AMTS (ING 15)
Ingredient Sequence Number: 14
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: ING 14: CAUSED SM DECR IN NUMBER OF LITTERS/PAIR, LIVE PUPS/
PAIR, & IN LIVE PUP WT.
Ingredient Sequence Number: 15
NIOSH (RTECS) Number: 9999999ZZ
OSHA PEL: NOT APPLICABLE
ACGIH TLV: NOT APPLICABLE

Proprietary: NO
Ingredient: WORK HYGIENIC PRAC: SUCH AS SHOES, BELTS AND WATCHBANDS, SHOULD BE REMOVED AND DESTROYED.
Ingredient Sequence Number: 16

NIOSH (RTECS) Number: 9999999ZZ

OSHA PEL: NOT APPLICABLE

ACGIH TLV: NOT APPLICABLE

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Physical/Chemical Characteristics

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Appearance And Odor: CLEAR, AMBER WITH SLIGHT ETHARIC ODOR.

Boiling Point: >460F,>238C

Vapor Pressure (MM Hg/70 F): <0.1 @ 20C

Specific Gravity: 1.036-1.04

Solubility In Water: COMPLETELY MISCIBLE

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Fire and Explosion Hazard Data

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Flash Point: 270F,132C

Flash Point Method: SCC

Extinguishing Media: WATER FOG, ALCOHOL-RESISTANT FOAM, CO*2, DRY
CHEMICAL.

Special Fire Fighting Proc: USE NIOSH APPROVED SCBA AND FULL PROTECTIVE
EQUIPMENT (FP N).

Unusual Fire And Expl Hazrds: NONE EXPECTED UNDER NORMAL STORAGE AND
HANDLING CONDITIONS (I.E. AMBIENT TEMPERATURES)

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Reactivity Data

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Stability: YES

Cond To Avoid (Stability): STABLE UNDER NORMAL STORAGE CONDITIONS.
AVOID

TEMPERATURES IN EXCESS OF 300C.

Materials To Avoid: OXIDIZING MATERIAL.

Hazardous Decomp Products: BURNING PRODUCES CARBON DIOXIDE AND CARBON
MONOXIDE.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): NOT RELEVANT

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Health Hazard Data

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LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: EYE: MAY CAUSE SEV IRRIT W/MOD CORNEAL
INJURY. VAPS/MISTS MAY IRRITATE. SKIN CONT: SHORT SINGLE EXPOS MAY
CAUSE

SEV IRRIT. SKIN ABSORPTION: SINGLE PRLGD EXPOS &/RPTD EXPOS MAY RSLT IN
MATL BEING ABSORBED IN HARMFUL AMTS. DERM LD50 NOT DETERM. INGEST:
SINGLE

DOSE ORAL TOX MOD. EXCESSIVE EXPOS MAY CAUSE(EFTS OF OVEREXP)

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NOT RELEVANT
Signs/Symptoms Of Overexp: HLTH HAZS: CNS SYS EFTS, CARDIOPULM EFTS
(METABOLIC ACIDOSIS), & KIDNEY FAILURE. INHAL: @ RM TEMP, VAPS OF
GLYCOLS
ARE MINIMAL DUE TO LOW VAP PRESS. IF HEATED/SPRAYED AS AN AEROSOL,
CONCS
MAY BE ATTAINED THAT ARE SUFFICIENT TO CAUSE IRRIT & OTHER EFTS. FORMIC
ACID, IF PRESENT, MAY CAUSE SEV IRRIT TO UPPER RESP (ING 6)
Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
Emergency/First Aid Proc: EYES: IMMED & CONTINUOUS IRRIGATION W/
FLOWING
WATER FOR @ LST 15 MINS IS IMPERATIVE. PROMPT MED CONSULTATION IS
ESSENTIAL. SKIN: IMMED FLUSH W/PLENTY OF WATER FOR @ LST 15 MINS WHILE
REMOVING CONTAM CLTHG & SHOES. CALL PHYS IF IRRIT PERSISTS. INGEST:
INDUCE
VOMIT IMMED AS DIRECTED BY MED PERS. NEVER GIVE ANYTHING BY MOUTH TO
UNCON
PERS. INHAL: REMOVE TO FRESH AIR IF EFTS OCCUR. CONSULT (SUPDAT)

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Precautions for Safe Handling and Use

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Steps If Matl Released/Spill: AVOID ENTRY INTO SEWERS AND NATURAL
WATERS.
SMALL SPILLS: SOAK UP WITH ABSORBENT MATERIAL. LARGE SPILLS: DIKE AND
PUMP
INTO SUITABLE CONTAINERS FOR DISPOSAL.
Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Method: BURN IN AN APPROVED INCINERATOR IN ACCORDANCE
WITH
ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
Precautions-Handling/Storing: WARNING! HARMFUL OR FATAL IF SWALLOWED.
MAY
BE HARMFUL IF INHALED. AVOID CONTACT WITH EYES, SKIN AND CLOTHING.
AVOID
BREATHING VAPOR OR MIST.
Other Precautions: USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER
HANDLING. KEEP CONTAINER CLOSED AND CLEARLY LABELED. KEEP OUT OF REACH
OF
CHILDREN.

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Control Measures

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Respiratory Protection: ATMOSPHERIC LEVELS SHOULD BE MAINTAINED BELOW
THE
EXPOSURE GUIDELINE. WHEN RESPIRATORY PROTECTION IS REQUIRED FOR CERTAIN
OPERATIONS, USE A NIOSH APPROVED AIR PURIFYING RESPIRATOR.
Ventilation: PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO
CONTROL
AIRBORNE LEVELS BELOW THE EXPOSURE GUIDELINES.
Protective Gloves: IMPERVIOUS GLOVES (FP N).
Eye Protection: ANSI APPRVD CHEM WORKERS GOGGLES (FP N).

Other Protective Equipment: ANSI APPRVD EYE WASH & DELUGE SHOWER (FP N).
PROT CLTHG IMPERVIOUS TO MATL. SELECTION OF BOOTS, APRON/FULL-BODY (SUPDAT)
Work Hygienic Practices: REMOVE CONTAM CLTHG IMMED, WASH SKIN AREA W/SOAP
& WATER, & LAUNDER CLTHG BEFORE REUSE. CONTAM LEATHER ITEMS, (ING 16)
Suppl. Safety & Health Data: FIRST AID:PHYS. NOTE TO PHYS:EARLY ADMIN OF
ETHANOL MAY COUNTER EFTS OF ETHYLENE GLYCOL-METABOLIC ACIDOSIS & RENAL
DMG.
HEMODIALYSIS/PERITONEAL DIALYSIS HAVE BEEN OF BENEFIT. SUPPORTIVE CARE.
TREATMENT BASED ON JUDGEMENT OF PHYS IN RESPONSE TO RXNS OF PATIENT.
OTHER
PROT EQUIP:SUIT WILL DEPEND ON OPERATION.

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Transportation Data

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Disposal Data

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Label Data

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Label Required: YES
Technical Review Date: 03FEB98
Label Status: G
Common Name: FADE FREE BRAKE FLUID
Chronic Hazard: YES
Signal Word: DANGER!
Acute Health Hazard-Severe: X
Contact Hazard-Severe: X
Fire Hazard-Slight: X
Reactivity Hazard-None: X
Special Hazard Precautions: COMBUSTIBLE. ACUTE: EYE: MAY CAUSE SEVERE
IRRITATION WITH MODERATE CORNEAL INJURY. VAPORS OR MISTS MAY IRRITATE.
SKIN
CONTACT: SHORT SINGLE EXPOSURE MAY CAUSE SEVERE IRRITATION. SKIN
ABSORPTION: SINGLE PROLONGED EXPOSURE AND/OR REPEATED EXPOSURE MAY
RESULT
IN MATERIAL BEING ABSORBED IN HARMFUL AMOUNTS. INGESTION: SINGLE DOSE
ORAL
TOXICITY MODERATE. EXCESSIVE EXPOSURES MAY CAUSE CENTRAL NERVOUS SYSTEM
INGESTION OF LARGE AMOUNTS MAY CAUSE BIRTH DEFECTS.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: MASTER AUTOM GROUP
Label P.O. Box: 381900
Label City: GERMANTOWN
Label State: TN

Label Zip Code: 38138-1190

Label Country: US

Label Emergency Number: 901-755-6677;800-255-3924