

MERITOR AUTOMOTIVE, INC -- NON-ASBESTOS BRAKE LININGS -- 2530-00-693-1007

=====
Product Identification
=====

Product ID:NON-ASBESTOS BRAKE LININGS

MSDS Date:03/01/1999

FSC:2530

NIIN:00-693-1007

Status Code:A

MSDS Number: CJSQX

=== Responsible Party ===

Company Name:MERITOR AUTOMOTIVE, INC

Address:2135 WEST MAPLE ROAD

City:TROY

State:MI

ZIP:48084

Country:US

Info Phone Num:248-435-9929

Emergency Pho

ne Num:248-435-9929

Resp. Party Other MSDS Num.:MSDS3

CAGE:TO398

=== Contractor Identification ===

Company Name:MERITOR AUTOMOTIVE, INC

Address:2135 WEST MAPLE ROAD

Box:City:TROY

State:MI

ZIP:48084

Country:US

Phone:248-435-9929

CAGE:TO398

Company Name:MERITOR HEAVY VEHICLE SYSTEMS LLC

Address:2135 W MAPLE RD

Box:City:TROY

State:MI

ZIP:48084

Country:US

Phone:248-435-8207

Contract Num:DLA740-93-M-2139

CAGE:78500

=====
Composition/Information on Ingredients
=====

Ingred Name:BAR

IUM SULFATE
CAS:7727-43-7
RTECS #:CR0600000
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:CLAY

Ingred Name:GRAPHITE

Ingred Name:GLASS FIBERS

Ingred Name:PHENOLIC RESIN
CAS:108-95-2
RTECS #:SJ3325000
OSHA PEL:19 MG/M3;5 PPM
ACGIH TLV:19 MG/M3;5 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:STEEL FIBERS (IRON)

Ingred Name:ALUMINUM OXIDE
CAS:1344-28-1
RTECS #:BD1200000
OSHA PEL:15 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:COPPER
CAS:7440-50-8
RTECS #:GL5325000
OSHA PEL:1 MG/M3
ACGI
H TLV:1 MG/M3
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:TIN
CAS:7440-31-5
RTECS #:XP7320000
ACGIH TLV:2 MG/M3

Ingred Name:QUARTZ
CAS:14808-60-7
RTECS #:VV7330000
OSHA PEL:see Table Z-3
ACGIH TLV:0.1 MG/M3

Ingred Name:MINERAL WOOL FIBER

Ingred Name:CRISTOBALITE
CAS:14464-46-1
RTECS #:VV7325000
OSHA PEL:see Table Z-3
ACGIH TLV:0.05 MG/M3

Ingred Name:WOLLASTONITE
CAS:13983-17-0
RTECS #:ZC9750000

:10 MG/M3

Ingred Name:FIBERFRAX (CERAMIC FIBER)

CAS:1302-76-7

RTECS #:BD1450000

Ingred Name:MOLYBDENUM DISULFIDE

CAS:1317-33-5

RTECS #:QA4697000

Ingred Name:ARAMID FIBER

CAS:24938-64-5

RTECS #:TQ9875000

Ingred Name:MAGNESIUM OXIDE

CAS:1309-48-4

RTECS #:OM3850000

OSHA PEL:15 MG/M3

ACGIH TLV:10 MG/M3

=====
===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO

Health Hazard

s Acute and Chronic:PROGLONGED EXPOSURE TO DUST MAY RESULT

IN CHRONIC BRONCHITIS, SHORTNESS OF BREATH OR DECREASED LUNG
FUNCTION. SHORT-TERM EFFECTS FROM INHALATION MAY INCLUDE MUCOUS
MEMBRANE IRRITATION AND IRRITATION T O THE UPPER RESPIRATOR TRACT.

Explanation of Carcinogenicity:IARC HAD FOUND THAT CRYSTALLINE SILICA,
AMORPHOUS SILICA, CERAMIC FIBERS, OR WOLLASTONITE MAY CAUSE CANCER
IN HUMAN. CRYSTALLINE SILICA IS ALSO LISTED BY THE NTP AS A

SUBSTANCE "WHICH MAY REASON
ABLY B E ANTICIPATED" TO BE
CARCINOGENIC.

Effects of Overexposure:SYMPTOMS OF PNEUMO-CONIOSIS, SILICOSIS,
FIBROSIS AND LUNG CANCER INCLUDE SHORTNESS OF BREATH, DRY
COUGH,FATIGUE ON EXERCISE,CHEST PAINS,CHEST TIGHTNESS AND VAGUE
FEELINGS OF SICKNESS. SUCH SYMPTOMS MA Y NOT MANIFEST THEMSELVES
UNTIL 15 TO 20YEARS OR MORE AFTER FIRST EXPOSURE. SKIN:IRRITATION &
INFLAMMATION DUE TO MECHANICAL ACTION FROM DUST. EYES:EXPOSURE TO
DUST MAY CAUSE IRRITATION. REPEATED OR P ROLO

NGED EXPOSURE MAY

CAUSE CONJUNCTIVITIS. INHALATION: SHORT TERM EFFECTS MAY INCLUDE MUCOUS MEMBRANE IRRITATION AND IRRITATION TO THE UPPER RESPIRATOR TRACT.

=====
First Aid Measures
=====

First Aid:SINCE THE INDIVIDUAL PARTICLES ARE DISPERSED IN A RESIN MATRIX WHICH HAS BEN PROCESSED INTO A THERMOSET COMPOSITE, EMERGENCY AND FIRST AID PROCEDURES FOR INHALATION SHOULD NOT BE NECESSARY. EYES: WAS H EYES IMMEDIATELY WITH LARGE AMOUNTS O

F

WATER, OCCASIONALLY LIFTING UPPER AND LOWER LIDS. IN CASE OF EYE IRRITATION, GET MEDICAL ATTENTION.

=====
Fire Fighting Measures
=====

Extinguishing Media:NEGLIGIBLE FIRE HAZARD IN METALLIC FORM. USE DRY SAND, DRY DOLOMITE, DRY GRAPHITE, SODIUM CHLORIDE. DO NOT USE WATER. AVOID BREATHING FUMES FROM BURNING MATERIALS

=====
Accidental Release Measures
=====

Spill Release Procedures:STEPS TO BE TAKEN IN CASE DUST OR WASTE

CONTAINING POTENTIALLY HAZARDOUS MATERIALS IS RELEASED OR SPILLED. AVOID CREATING AIRBORNE DUST. USE A VACUUM WITH A HEPA FILTER OR REMOVE BY USING WATER. DO NO T DRY SWEEP OR USE COMPRESSED AIR ON DRY MATERIAL. WEAR PROTECTIVE EQUIPMENT

=====
Handling and Storage
=====

Handling and Storage Precautions:OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE.

Other Precautions:NONE PROVIDED BY MFR

=====
Exposure Controls/Personal Protection
=====

Respiratory Protection:WEAR RESPIRATORY PROTECTION AT ALL TIMES DURING BRAKE SERVICING BEGINNING WITH REMOVAL OF THE WHEELS.WEAR A RESPIRATOR EQUIPPED WITH A HIGH-EFFICIENCY (HEPA) FILTER APPROVED BY NIOSH OR MSHA, IF THE E XPOSURE LEVELS EXCEED OSHA OR RECOMMENDED MAXIMUM LEVELS. EVEN WHEN EXPSOURES ARE EXPECTED TO BE WITHIN THE MAXIMUM ALLOWABLE LEVELS, WEARING SUCH A RESPIRATOR

Ventilation:ALL FEASIBL

ENGINEERING CONTROLS AND WORK PRACTICES SHOULD BE INSTITUTED TO REDUCE WORKER EXPOSURE LEVELS AS LOW AS POSSIBLE
Protective Gloves:PROTECTIVE GLOVES FOR PERSONS SENSITIVE TO PHENOLIC RESINS AND FIBERGLASS
Eye Protection:USE OF EYE PROTECTION IS GOOD PRACTICE AT ALL TIMES AND NECESSARY WHEN DRILLING
Other Protective Equipment:LONG-SLEEVED SHIRTS AND OTHER PROTECTIVE CLOTHING ARE RECOMMENDED FOR PERSONS WITH SKIN SENSITIVE TO PHENOLIC RESINS AND FIBERGLASS.

Work Hygienic Practices:NONE PROVIDED BY MFR.
Supplemental Safety and Health NONE PROVIDED BY MFR.

===== Physical/Chemical Properties =====

HCC:T6
Spec Gravity:2-4 GRAMS/CC
Solubility in Water:INSOLUBLE
Appearance and Odor:GRAY-BLACK SOLID

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
NONE PROVIDED BY MFR.
Stability Condition to Avoid:THE INDIVIDUAL PARTICLES ARE DISPERSED IN A RESIN MATRIX, WHICH HAS BEEN PROCESSED INTO A THERMOSET COMPOSITE. NO KNOWN REACTIVITY HAZARDS EXIST WHEN THE PRODUCT IS USED AS INTENDED
Hazardous Decomposition Products:THERMAL DECOMPOSITION MAY RELEASE TOXIC AND/OR HAZARDOUS GASES
Conditions to Avoid Polymerization:HAZARDOUS POLYMERIZATION HAS NOT BEEN REPORTED TO OCCUR UNDER NORMAL TEMPERATURES OR PRESSURES.

===== Disposal Considerations =====

Waste Disposal Methods:OBSERVE ALL FEDERAL, STATE AND LOCAL REGULATIONS WHEN STORING OR DISPOSING OF THIS SUBSTANCE.

===== Other Information =====

Disclaimer (provided with this information by the compiling agencies):
This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice

to verify and
assume responsibility for the suitability of this information to their
particular situation.