

GENERAL MOTORS CORP DELCO MORAIN DIV -- METALLIC DISK BRAKE LINING COMPOUND --
2530-01-331-2708

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

Product ID:METALLIC DISK BRAKE LINING COMPOUND

MSDS Date:11/02/1992

FSC:2530

NIIN:01-331-2708

MSDS Number: BTNBL

=== Responsible Party ===

Company Name:GENERAL MOTORS CORP DELCO MORAIN DIV

Address:1420 WISCONSIN BLVD

Box:1245

City:DAYTON

State:OH

ZIP:45401

Country:US

Info Phone Num:513-227-6240

Emergency Phone Num:513-227-6240

Preparer's Name:GARRY J. HILL

CAGE:11862

=== Contractor Identification ===

Company Name:GENERAL MOTORS CORP CHEVROLET MOTOR DIV

Address:30007 VAN DYKE

Box:City:WARREN

State:MI

ZIP:48090

Country:US

CAGE:11862

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

Ingred Name:MAGNESIUM OXIDE

CAS:1309-48-4

RTECS #:OM3850000

Fraction by Wt: < 10%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 MG/M3 PARTICULATE

ACGIH TLV:10

MG/M3, FUME; 9394

Ingred Name:TITANIUM(IV) OXIDE

CAS:1317-80-2

RTECS #:XR2275000

Fraction by Wt: < 5%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST 9091

Ingred Name:ALPHA-ALUMINA (ALUMINUM OXIDE) (SARA III)

CAS:1344-28-1

RTECS #:BD1200000

Fraction by Wt: < 5%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:CARBON BLACK OR ACTIVATED CARBON

CAS:7440-44-0

RTECS #:FF5250100

Fraction by Wt: < 5%

Other REC L

imits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:2 MG/M3 RDUST; 9394

Ingred Name:BARIUM SULFATE

CAS:7727-43-7

RTECS #:CR0600000

Fraction by Wt: < 10%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9394

Ingred Name:GRAPHITE (NATURAL)

CAS:7782-42-5

RTECS #:MD9659600

Fraction by Wt: < 25%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MPPCF; Z-3

ACGIH TLV:2 MG/M3 RDUST; 9394

Ingred Name:PHENOL FORMALDEHYDE RESIN

CAS:9003-35-4

Fraction by Wt: < 10%

Othe

r REC Limits:NONE RECOMMENDED

Ingred Name:RUBBER

CAS:9006-04-6

Fraction by Wt: < 5%

Other REC Limits:NONE RECOMMENDED

Ingred Name:STEEL

CAS:65997-19-5

Fraction by Wt: < 30%

Other REC Limits:NONE RECOMMENDED

Ingred Name:FRICITION PARTICLES

Fraction by Wt: < 10%

Other REC Limits:NONE RECOMMENDED

Ingred Name:STEEL WOOL

Fraction by Wt: 30-70% %

Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:TLV = 10 MG/M3 (NUISANCE DUSTS)

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

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

Health Hazards Acute and Chronic:OVEREXPOSURE TO DUST MAY RESULT IN
ADVERSE PULMONARY EFFECTS.

Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT
CONCENTRATIONS OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT
CARCINOGENS.

Effects of Overexposure:RESPIRATORY IRRITATION, LUNG INJURY

Medical Cond Aggravated by Exposure:PRE-EXISITNG RESPIRATORY AILMENTS

MAY BE AGGRAVATED BY EXPOSURE.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. EYES: FLUSH WITH WATER. SEE
PHYSICIAN IF IRRITATION CONTINUES.

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

Flash Point:NONFLAMMABLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:NONFLAMMABLE. USE MEDIA SUITABLE FOR SURROUNDING
FIRE.

Fire Fighting Procedures:NONFLAMMABLE. USE PROCEDURES SUITABLE FOR

SURROUNDING FIRE.

Unusual Fire/Explosion Hazard:AS WITH ALL DUSTS, AVOID BUILD-UP,
POTENTIAL FOR EXPLOSION UNDER CERTAIN CONDITIONS.

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

Spill Release Procedures:NONE SPECIFIED BY MANUFACTURER.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:AVOID WET OR DAMP STORAGE THAT COULD
RUST GROUND SURFACES.

Other Precauti

ons:MAINTAIN GOOD HOUSEKEEPING PRACTICES. SPARKS MAY BE
PRODUCED UNDER SOME GRINDING CONDITIONS.

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

Respiratory Protection:NORMALLY NOT REQUIRED.

Ventilation:LOCAL EXHAUST AND MECHANICAL (GENERAL) VENTILATION TO
MAINTAIN EXPOSURE LEVELS.

Protective Gloves:LEATHER

Eye Protection:SAFETY GLASSES

Other Protective Equipment:NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices:WASH WITH SOAP AND WATER AFTER HANDLING PRODUCT
AND BEFORE EATING DRINKING OR SMOKING.

Supplemental Safety and Health

NONE SPECIFIED BY MANUFACTURER.

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

HCC:N1

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Vapor Pres:NOT GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:2.6 - 3.54

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:NOT GIVEN

Appearance and Odor:GREY BLACK SOLID, NO ODOR

Percent Volatiles by Volume:NIL

===== Stabili

ty and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

NONE IN DESIGNED USE.

Stability Condition to Avoid: MOISTURE

Hazardous Decomposition Products: NONE SPECIFIED BY MANUFACTURER.

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

Waste Disposal Methods: DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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.