

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  
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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.

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