

ROCKWELL INTERNATIONAL CORP GOVERNMENT PRODUCTS -- BRAKE LININGS CONTAINING  
ASBESTOS -- 2530-01-017-0616

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

Product ID: BRAKE LININGS CONTAINING ASBESTOS

MSDS Date: 07/24/1989

FSC: 2530

NIIN: 01-017-0616

MSDS Number: BPJGT

=== Responsible Party ===

Company Name: ROCKWELL INTERNATIONAL CORP GOVERNMENT PRODUCTS

Address: 2135 W MAPLE RD

City: TROY

State: MI

ZIP: 48084-7121

Coun

try: US

Emergency Phone Num: 313-435-1688

CAGE: 78500

=== Contractor Identification ===

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

CAGE: 78500

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

Ingred Name: ASBESTOS, CHRYSOTILE/ASBESTOS (CHRYSOLITE), TALC

CAS: 12001-29-5

RTECS #: CI6478500

Other REC Limits: NONE RECOMMENDED

OSHA PEL: 0.2 FIBERS/CC

ACGIH TLV: 2 FIBERS/CC; A1; 9293

Ingred Name: SILI

CA, CRYSTALLINE - TRIPOLI

CAS:1317-95-9

RTECS #:VV7336000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:SEE TABLE Z3

ACGIH TLV:0.1 MG/M3 RDUST;9293

Ingred Name:CARBON BLACK (GRAPHITE, COAL, COKE)

CAS:1333-86-4

RTECS #:FF5800000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:3.5 MG/M3

ACGIH TLV:3.5 MG/M3; 9293

Ingred Name:PHENOLIC RESIN (ISOPRENE OR CASHEW)

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5.0 MG/M3 (MFR)

ACGIH TLV:5.0 MG/M3 (MFR)

Ingred Name:WOOD FLOUR/WOOD FLOUR AND OTHER FILLERS

Other RE

C Limits:NONE RECOMMENDED

ACGIH TLV:1.0 MG/M3 (MFR)

Ingred Name:IRON, ZINC, ALUMINUM, MAGNESIUM, AND THEIR OXIDES

Other REC Limits:NONE RECOMMENDED

OSHA PEL:5.0 MG/M3 RDUST(MFR)

ACGIH TLV:5.0 MG/M3 RDUST(MFR)

Ingred Name:COPPER OXIDE

CAS:1317-39-1

RTECS #:GL8050000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.1 MG/M3 AS (CU)

ACGIH TLV:0.1 MG/M3 AS (CU)

Ingred Name:CALCIUM CARBONATE (MARBLE) (LIMESTONE)

CAS:1317-65-3

RTECS #:EV9580000

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

A

CGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:FLUORIDE SALT/FLUORIDES  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:2.5 MG/M3  
ACGIH TLV:2.5 MG/M3

Ingred Name:RUBBER  
Other REC Limits:NONE RECOMMENDED

Ingred Name:BARIUM COMPOUNDS  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.5 MG/M3 AS BA  
ACGIH TLV:0.5 MG/M3 AS BA

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

LD50 LC50 Mixture:TLV FOR ASBESTOS FIBERS 2 FIBER/CC

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

Reports of C

arcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:ACUTE AND CHRONIC- MAY CAUSE EYE, SKIN AND/OR UPPER RESPIRATORY TRACT IRRITATION. SOME SENSITIVE PERSONS MAY DEVELOP DERMATITIS. BREATHING OF ASBESTOS FIBERS MAY PRODUCE IRREVERSIBLE LUNG DISEASE AND CANCER. EFFECTS OF EXPOSURE MAY NOT BE IMMEDIATELY EVIDENT. INGESTION OF DUST MAY BE HARMFUL.

Explanation of Carcinogenicity:CONTAINS ASBESTOS.

Effects of Overexposure:SYMPTOMS OF ASBESTOSIS, PNEUMOCONIOSIS & LUNG

CANCER INCLUDE SHORTNESS OF BREATH, DRY COUGH, FATIGUE ON EXERCISE, CHEST PAINS, CHEST TIGHTNESS, CLUBBING OF FINGERS. SYMPTOMS USUALLY MANIFEST AFTER 15-20 YEARS. OTHER SIGNS MAY BE DISCOVERED BY TRAINED MEDICAL PERSONNEL USING X-RAYS, PULMONARY FUNCTION TESTS ETC..

Medical Cond Aggravated by Exposure:PERSONS WITH IMPAIRED RESPIRATORY FUNCTION, WILSON'S DISEASE (FROM COPPER EXPOSURE) MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THE SUBSTANCE.

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

First Aid:GET MEDICAL ATTENTION IF NEEDED. SKIN:WASH WITH SOAP & WATER.  
EYE:FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN.  
INHALED:REMOVE TO FRESH AIR. PROVIDE OXYGEN/CPR IF NEEDED.  
ORAL:RINSE MOUTH WITH WATER. CALL A PHYSICIAN.

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

Flash Point:NONE  
Extinguishing Media:WATER OR CLASS A, B OR C EXTINGUISHER  
Fire Fighting Procedures:WEAR NIOSH-APPROVED SELF-C

CONTAINED BREATHING  
APPARATUS.

Unusual Fire/Explosion Hazard:BURNING MAY PRODUCE AIRBORNE FIBERS OR  
PARTICULATE.

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

Spill Release Procedures:VACUUM FIBERS AND DUSTS, CAREFULLY, AVOIDING  
DUSTING. IF SWEEPING IS USED, CONTROL DUST BY WETTING AND USE  
APPROPRIATE DUST MASK. VACUUMING WITH A HEPA FILTERED VACUUM IS  
PREFERRED. DO NOT USE COMPRESSED AIR FOR CLEANING. WEAR RESPIRATOR  
IF NEEDED.

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

Handling and Storage Precautions:STORAGE AND HANDLING- AVOID CREATING  
OR BREATHING DUST. AVOID SCRAPING OR SCRATCHING BRAKE LININGS.  
Other Precautions:EXPOSURE LEVELS TO DUST CONTAINING ASBESTOS FIBERS  
SHOULD BE MONITORED IN ACCORDANCE WITH OSHA REGULATIONS 29 CFR  
1910,1001.SMOKING WILL INCREASE RISK FROM ASBESTOS EXPOSURE.THOSE  
WORKING WITH PRODUCTS CONTAINING ASBESTOS SHOULD NOT SMOKE.

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

Respiratory Protection:NONE REQUIRED WHERE ADEQUATE VENTILATION  
CONDITIONS EXIST. IF DUSTS OR FIBERS PRESENT, A NIOSH-APPROVED DUST  
RESPIRATOR IS RECOMMENDED. IF CONCENTRATION EXCEEDS CAPACITY OF  
RESPIRATOR, USE SELF-CONTAINED BREATHING APPARATUS.

Ventilation:MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO  
MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves:RUBBER RECOMMENDED

Eye Protection:SAFETY GOGGLES

Other Protective Equipment:EYE WASH STATION,  
QUICK DRENCH SHOWER AND IMPERVIOUS CLOTHING

Work Hygienic Practices:KEEP WORK AREA CLEAN OF ASBESTOS DUST.  
Supplemental Safety and Health

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

HCC:T6

Spec Gravity:1.6 - 3.0

Evaporation Rate & Reference:0 (N-BUTYL ACETATE=1)

Solubility in Water:INSOLUBLE

Appearance and Odor:SOLID, LIGHT TAN TO DARK GREY IN COLOR

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

Stability Indicator/Materials to Avoid

id:YES

STRONG OXIDIZING AGENTS

Stability Condition to Avoid:AVOID CREATING AND BREATHING DUST.

Hazardous Decomposition Products:UNBOUND ASBESTOS FIBERS MAY BE  
RELEASED ALONG WITH TOXIC FUMES.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE  
AND FEDERAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Dep  
artment

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.