

BOSCH BRAKING SYSTEMS -- BRAKE SYSTEM HYDRO-BOOST, (SEE SUPPL.) -- 2530-01-437-4242

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

Product ID: BRAKE SYSTEM HYDRO-BOOST, (SEE SUPPL.)

MSDS Date: 04/22/1999

FSC: 2530

NIIN: 01-437-4242

Status Code: A

MSDS Number: CLHPQ

=== Responsible Party ===

Company Name: BOSCH BRAKING SYSTEMS

Address: 3737 RED ARROW HIGHWAY

City: ST. JOSEPH

State: MI

ZIP: 48085

Country: US

Info Phone N

um: (616) 428-6385

Emergency Phone Num: (616) 428-7500

Resp. Party Other MSDS Num.: BBS0002

CAGE: UO639

=== Contractor Identification ===

Company Name: BOSCH BRAKING SYSTEMS

Address: 3737 RED ARROW HIGHWAY

Box: City: ST. JOSEPH

State: MI

ZIP: 48085

Country: US

Phone: (616) 428-6385

CAGE: UO639

Company Name: GENERAL MOTORS CORP

Address: GENERAL MOTORS BUILDING 3044 GRAND BLVDW

Box: City: DETROIT

State: MI

ZIP: 48202-3091

Country: US

Phone: 301-258-1535

CAGE: 24617

=====  
Composition/Information on Ingredients

=====  
Ingrid Name:NITROGEN (GASEOUS STATE)

CAS:7727-37-9

RTECS #:QW9700000

= Wt:100.

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

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

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

Health Hazards Acute and Chronic:SKIN: DO NOT EXPOSE SKIN TO VENTING GAS FROM CYLINDER, WHICH CAN CAUSE BURNS AND BLISTERS. EYES: MAY CAUSE CRYOGENIC BURNS IF EXPOSED TO VENTING GAS. INHALATION: NITROGEN IS AN AS

PHYXIANT. NITROGEN UN DER HIGH PRESSURE CAN CAUSE NARCOSIS EVEN THOUGH SUFFICIENT OXYGEN IS PRESENT. THE QUANTITY CONTAINED IN THE BRAKE SYSTEM ACCUMULATOR IS NOT EXPECTED TO PRODUCE A HAZARDOUS ATMOSPHERE. INGESTION: NOT AN ANTICIPATED ROUTE OF ENTRY. DELAYED EFFECTS: NONE EXPECTED.

Explanation of Carcinogenicity:NITROGEN IS NOT ON THE CARCINOGEN LISTS OF NTP STATUS, IARC STATUS, OSHA LIST.

Effects of Overexposure:SKIN: BURNS AND BLISTERS. EYES: CRYOGENIC BURNS IF EXPOS

ED TO VENTING GAS. INHALATION: NITROGEN IS AN ASPHYXIANT.

NITROGEN UNDER HIGH PRESSURE CAN CAUSE NARCOSIS EVEN THOUGH SUFFICIENT OXYGEN IS PRESE NT. THE QUANTITY CONTAINED IN THE BRAKE SYSTEM ACCUMULATOR IS NOT EXPECTED TO PRODUCE A HAZARDOUS ATMOSPHERE. INGESTION: NOT AN ANTICIPATED ROUTE OF ENTRY. DELAYED EFFECTS: NONE EXPECTED.

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

First Aid:NOTE: IF ANY OF THE SYMPTOMS PERSIST, SEEK MEDICAL ATTENTION

I  
MMEDIATELY. SKIN: WASH SKIN BY FLOODING OR SOAKING WITH WARM WATER (105-115F, 41-45C). DO NOT USE HOT WATER. EYES: FLOOD EYES WITH WARM WA TER (105-115F, 41-45C). CONTACT A PHYSICIAN IMMEDIATELY. INHALATION: REMOVE AFFECTED PERSON TO FRESH AIR. CONTACT A PHYSICIAN IMMEDIATELY. INGESTION: NOT AN ANTICIPATED ROUTE OF ENTRY. ADVICE TO PHYSI CIAN: TREAT ACCORDING TO SYMPTOMS PRESENT.

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

Extinguishing Media:NOT FL

AMMABLE. USE EXTINGUISHING MEDIA APPROPRIATE FOR THE SURROUNDING AREA.

Fire Fighting Procedures:NONE.

Unusual Fire/Explosion Hazard:BRAKE SYSTEM ACCUMULATORS EXPOSED TO HIGH HEAT OR FLAME MAY VENT RAPIDLY.

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

Spill Release Procedures:WEAR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT. ALLOW BRAKE SYSTEMS ACCUMULATOR TO VENT SAFELY UNTIL GAS HAS ESCAPED. DO NOT ATTEMPT TO STOP GAS FROM VENTING FROM BRAKE SYSTEM ACC

UMULATOR. DO NOT BREA THE GAS. AVOID CONTACT WITH SKIN, EYES, CLOTHING. SPILLS AND RELEASES DO NOT HAVE TO BE REPORTED TO FEDERAL AND/OR LOCAL AUTHORITIES SINCE NO ESTABLISHED REPORTABLE QUANTITY (RQ) EXISTS FOR NITROGEN.

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

Handling and Storage Precautions:WEAR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT. DO NOT RUPTURE CONTAINER. AVOID CONTACT WITH EYES, SKIN , AND CLOTHING. PROTECTIVE CAPS SHOULD REMAIN ON TH E BRAKE SYSTEM

ACCUMULATOR UNITS UNTIL INSTAL LATION.

Other Precautions:STORAGE: STORE IN A WELL-VENTILATED AREA AWAY FROM HEAVY TRAFFIC. STORE AWAY FROM SOURCES OF HEAT.

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

Respiratory Protection:NONE NORMALLY REQUIRED.

Ventilation:GENERAL VENTILATION IS SUFFICIENT TO DISSIPATE GAS SHOULD IT BE RELEASED.

Protective Gloves:NONE NORMALLY REQUIRED.

Eye Protection:SAFETY GLASSES ARE ADEQUATE FOR ALL USES.

Other Protectiv

e Equipment:NONE NORMALLY REQUIRED.

Supplemental Safety and Health

VENDOR PART NUMBER: GENERAL MOTORS CORP. CAGE 24617: P/N 157 57258.

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

HCC:G3

Boiling Pt:=-195.8C, -320.5F

Melt/Freeze Pt:=-210.C, -346.F

Vapor Density:.073(AIR=1

Spec Gravity:0.967 (H2O=1)

Evaporation Rate & Reference:HIGH COMPARED TO BUTYL AC

Solubility in Water:1.52% BY VOLUME.

Appearance and Odor:GASEOUS NITROGEN IS COLORLESS AND ODORLESS

=====

== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES  
NONE.

Stability Condition to Avoid: DIRECT HEAT AND PRESSURE. NITROGEN IS  
STABLE AT NORMAL CONDITIONS OF ORDINARY USE, HANDLING AND STORAGE  
UNDER NORMAL TEMPERATURE AND PRESSURE.

Hazardous Decomposition Products: NONE

===== Toxicological Information =====

Toxicological Information: IMMEDIATE (ACUTE) EFFECTS: SIMPLE ASPHYXIAN.  
DELAYED (SUBCHRONIC AND CHRONIC) E  
FFECTS: NONE EXPECTED. OTHER  
DATA: NONE.

===== Ecological Information =====

Ecological: NONE EXPECTED.

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

Waste Disposal Methods: DISPOSE IN ACCORDANCE TO ALL APPLICABLE FEDERAL,  
STATE, AND LOCAL REGULATIONS. UNUSED NITROGEN IS NOT A RCRA  
HAZARDOUS WASTE. THIS INFORMATION IS BASED ON PRODUCT AS SHIPPED.  
USE AND ALTERATIONS TO PRODUCT SUCH AS MIXING WITH OTHER MATERIALS  
MAY CH  
ANGE THE PRODUCT CHARACTERISTICS AND ALTER THE RCRA  
CLASSIFICATION AND THE PROPER DISPOSAL METHOD.

===== MSDS Transport Information =====

Transport Information: U.S. DOT HAZARD CLASS: CLASS 2.2 \_ NONFLAMMABLE  
GAS; PROPER SHIPPING NAME: ACCUMULATORS, PRESSURIZED, PNEUMATIC OR  
HYDRAULIC (CONTAINS NON-FLAMMABLE NITROGEN GAS); NA 1956. IATA:  
HAZARD CLASS 2.2 - NONFLAMMABLE GAS; PROPER SHIPPING NAME:  
ARTICLE, PRESSURIZED, PNEUMATIC CONTAINS NON-FLA  
MMABLE GAS. IATA:  
UN 3164.

===== Regulatory Information =====

SARA Title III Information: CERCLA: "REPORTABLE QUANTITIES" (RQ'S)  
AND/OR "THRESHOLD PLANNING QUANTITIES" (TPQ'S) EXIST FOR THE  
FOLLOWING INGREDIENTS: NONE. SPILLS OR RELEASES RESULTING IN THE  
LOSS OF ANY INGREDIENT AT OR ABOVE ITS RQ REQUIRES IMMEDIATE  
NOTIFICATION TO THE NATIONAL RESPONSE CENTER (800-424-8802) AND TO  
YOUR LOCAL EMERGENCY PLANNING COMMITTEE. SECTION 311 HAZAR

D CLASS:

IMMEDIATE (PRESSURE). SARA 313 TOXIC CHEMICALS: THE FOLLOWING  
INGREDIENTS ARE SARA 311 "TOXIC CHEMICALS": NONE.

Federal Regulatory Information:TSCA INVENTORY STATUS: EXEMPT:

ACCUMULATOR IS AN ARTICLE. NITROGEN GAS IS ON THE TSCA INVENTORY.

OTHER TSCA ISSUES: NONE.

State Regulatory Information:NONE LISTED.

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

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

This information is formu

lated 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.