# MATERIAL SAFETY DATA SHEET: DYNA-BRAKE

DATE OF ISSUE: 09/10/2003				SUPERCEDE	<b>S:</b> 08/19/2003
	SECTION I	- GENERAL INFORM	<b>IATION</b>		
Chemical Name & Synonyms N/A Chemical Family:			Trade Name & S DYNA-BRAKE Formula Mixture	Synonyms: e: X	
Manufacturer's Name:					
Partsmaster, Div of NCH Corp. Address:					
P.O. Box 655326					
Prenared Rv:	Product Co	de Number	Emerger	ncy Phone Numb	er
L Boynton/Chemist	5606		800-424-	·9300	
	SECTION II -	HAZARDOUS INGR			
THE HAZARL					CAS #
METHYLENE CHLORIDE	IRR/CARC	50 PPM 1.	25 PPM 2.	125 PPM 2.	75-09-2
PERCHLOROETHYLENE	IRR/CARC	25 PPM 1.	100 PPM 2.	100 PPM 1.	127-18-4
CARBON DIOXIDE	ASPHYXIA	NT 5000 PPM 1	5000 PPM 2	30000PPM 1	124-38-9
	SECTIO	N III - PHYSICAL DA			_
Boiling Point (f):	154° 2887 72	Specific Gravity	(H20=1):	1.45-1.5 COLOR	
Vapor Pressure (MM HG):	2007.73	Color: Odor:		COLORI ETHER	-E22
PH @ 100% :	N/A	Clarity		TRANS	
% Volatile by Volume:	100	Evaporation Rat	e (BU A/C=1):	95.9	
H20 Solubility:	NEGLIGIBLE	Viscosity:		NON-VI	SCOUS
	SECTION IV - F		N HAZARD		
Flash Point:	Flamm	able Limits:	<u></u>	LEL:	UEL:
>200°F / SETAFLASH	METH'	YLENE CHLORIDE		12%	19%
Extinguishing Media:					
Foam:X Alcohol Foam:X	CO2:X	Dry Chemical:X	Water	Spray:X	Other:
Special Fire Fighting Proced	ures:				
FIREFIGHTERS SHOULD WEAR A SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. EXTINGUISHING MEDIA SHOULD BE CHOSEN BASED ON THE NATURE OF THE SURROUNDING FIRE. COOL FIRE- EXPOSED CONTAINERS WITH WATER SPRAY TO PREVENT BURSTING.					
Unusual Fire and Explosion	Hazards:				
VAPORS ARE HEAVIER THAT AND FLASHBACK WHEN IN T UPON APPLICATION OF DIRI MAY BE SLIPPERY. FLAME E	N AIR AND MAY TRAV "HE FLAMMABLE LIMI" ECT WATER STREAM. "XTENSION IS 0 INCHE	EL TO DISTANT LO TS. VIOLENT STEAN CONTAIN FIRE RU ES, BURNBACK IS 0	W LYING AREAS I GENERATION ( N-OFF IF POSSIE INCHES.	AND SOURCES ( DR ERUPTION M BLE. USE CARE A	OF IGNITION AY OCCUR \S SPILLS
Aerosol Level (NFPA 30B):					1
NFPA Hazard Rating:	(0=Insignificant 1=	Slight 2=Moderate	3=High 4=Extrem	ie)	
Health:2 Flam	mability:1	Instabil	ity:0	Special:	
SECTION V - HEALTH HAZARD DATA					

**Threshold Limit Value:** 

# NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

# Effects of Overexposure:

# -Acute(Short Term Exposure)

EYE CONTACT: CAUSES SEVERE IRRITATION SEEN AS TEARING, STINGING, REDNESS, AND BLURRED VISION. PROLONGED CONTACT MAY CAUSE CORNEAL DAMAGE. SKIN CONTACT: CAUSES IRRITATION SEEN AS ITCHING AND REDNESS. PROLONGED CONTACT MAY CAUSE A BURNING SENSATION, FLAKING, DRYNESS, AND DEFATTING OF THE SKIN. PRODUCT MAY BE ABSORBED THROUGH THE SKIN IN HARMFUL AMOUNTS. INHALATION: CAUSES RESPIRATORY IRRITATION SEEN AS COUGHING AND SNEEZING. AT HIGH VAPOR CONCENTRATIONS, INHALATION MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS HEADACHE, DIZZINESS, DROWSINESS, WEAKNESS, UNCONCIOUSNESS, DRUNKENNESS, LOSS OF COORDINATION AND CONCENTRATION, METALLIC TASTE, SALIVATION, CARDIAC ARRHYTHMIAS (IRREGULAR HEARTBEAT), POSSIBLE ANESTHETIC EFFECTS FROM CENTRAL NERVOUS SYSTEM DEPRESSION AND MAY BE FATAL. EXCESSIVE EXPOSURE MAY POTENTIALLY INCREASE SENSITIVITY TO EPINEPHRINE AND INCREASE MYOCARDIAL IRRITABILITY. ALCOHOL CONSUMED BEFORE OR AFTER EXPOSURE MAY INCREASE ADVERSE EFFECTS. INGESTION: MAY CAUSE IRRITATION WITH POSSIBLE NAUSEA, VOMITING, AND DIARRHEA. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SIMILAR TO INHALATION. INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. ALCOHOL MAY EXACERBATE THE EFFECTS OF OVEREXPOSURE. AVOID ALCOHOL CONSUMPTION.

### -Chronic (Long Term Exposure)

EXCESSIVE EXPOSURE MAY CAUSE CARBOXYHEMOGLOBINEMIA, THEREBY IMPAIRING THE BLOOD'S ABILITY TO TRANSPORT SUFFICIENT OXYGEN. CARDIAC SENSITIZATION TO CIRCULATING EPINEPHRINE -LIKE COMPOUNDS CAN RESULT IN SUDDEN, FATAL CARDIAC ARRHYTHMIAS. HIGH CONCENTRATIONS CAN INDUCE LIVER INJURY. MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE ARE PRE-EXISTING RESPIRATORY AND SKIN CONDITIONS SUCH AS ASTHMA, EMPHYSEMA, AND DERMATITIS; PRE-EXISTING KIDNEY, LUNG, LIVER, CORONARY, AND BLOOD DISEASES AND RHYTHM DISORDERS OF THE HEART. TARGET ORGANS: BLOOD, CENTRAL NERVOUS SYSTEM, HEART, LIVER, LUNGS, AND KIDNEYS.

Ingestion:

Absorption:X

#### Primary Routes of Entry: Inhalation:X

### **Emergency and First Aid Procedures:**

### -Inhalation:

REMOVE FROM THE AREA TO FRESH AIR. IF NOT BREATHING, CLEAR THE AIRWAY AND START MOUTH TO MOUTH ARTIFICIAL RESPIRATION. GET IMMEDIATE MEDICAL ATTENTION.

### -Eye Contact:

IMMEDIATELY RINSE THE EYES WITH WATER. REMOVE ANY CONTACT LENSES AND CONTINUE FLUSHING FOR AT LEAST 15 MINUTES. HOLD THE EYELIDS APART TO ENSURE RINSING OF THE ENTIRE SURFACE OF THE EYES AND LIDS WITH WATER. GET IMMEDIATE MEDICAL ATTENTION.

### -Skin Contact:

WASH AFFECTED AREAS WITH LARGE AMOUNTS OF SOAP AND WATER FOR 15 MINUTES. REMOVE CONTAMINATED CLOTHING AND SHOES. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS. WASH CLOTHING AND CLEAN SHOES BEFORE REUSE.

### -Ingestion:

GIVE 3 TO 4 GLASSES OF WATER, BUT DO NOT INDUCE VOMITING. IF VOMITING OCCURS, GIVE FLUIDS AGAIN. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSING PERSON.

# -Notes to Physician:

INGESTION AND SUBSEQUENT VOMITING OF THIS PRODUCT CAN LEAD TO ASPIRATION OF THE PRODUCT INTO THE LUNGS WHICH CAN CAUSE DAMAGE AND MAY BE FATAL. DEPENDING ON THE AMOUNT INGESTED AND RETAINED AS WELL AS THE TOXICITY OF THE PRODUCT, GASTRIC LAVAGE SHOULD BE CONSIDERED. KEEP PATIENT'S HEAD BELOW HIPS TO PREVENT PULMONARY ASPIRATION. IF COMATOSE, A CUFFED ENDOTRACHAEL TUBE WILL PREVENT ASPIRATION.

SECTION VI - TOXICITY INFORMATION				
Product Contains Chemicals Listed as Carcinogen or Potential Carcinogen By:				
IARC: Yes	NTP: Yes	OSHA: Yes	ACGIH: Yes	OTHER: Yes
VOC CONTENT: 0	% BY WEIGHT; 0% BY	VOLUME; 0 G/L		
METHYLENE CHLO ORL-HMN LDLO	RIDE : 357 MG/KG	3.		

ORL-RAT LD50: 1600 MG/KG 3. SKN-RBT SDT: 100 MG/24H MODERATE 3. EYE-RBT SDT: 162 MG MODERATE 3. IHL-RAT LC50: 52 G/M3 3. TUMORIGENIC DATA IHL-RAT TCLO: 3500 PPM/6H/2Y-I 3.

ACGIH GROUP A3 IARC GROUP 2B

METHYLENE CHLORIDE HAS BEEN EVALUATED FOR POSSIBLE CANCER CAUSING EFFECTS IN LABORATORY ANIMA EPIDEMIOLOGY STUDIES OF 751 HUMANS CHRONICALLY EXPOSED IN THE WORKPLACE OF WHICH 252 WERE EXP MUTAGENICITY - METHYLENE CHLORIDE HAS BEEN EVALUATED FOR ITS POTENTIAL TO INDUCE GENOTOXIC EF REPRODUCTIVE TOXICITY - LABORATORY ANIMAL STUDIES ON MICE, RATS AND RABBITS HAVE BEEN CONDUCT

#### PERCHLOROETHYLENE

 IHL-RAT LC50: 34,200 MG/M3/8H
 3.

 ORL-RAT LD50: 2629 MG/KG
 3.

 SKN-RBT LD50: >3228 MG/KG
 3.

 SKN-RBT SDT: 500 MG/24H MILD
 3.

 EYE-RBT SDT: 500 MG/24H MILD
 3.

 EYE-RBT: SEVERE
 4.

ACGIH GROUP A3 IARC GROUP 2A AND 2B NTP: A LIFETIME RAT AND MOUSE EXPERIMENT SHOWED CLEAR EVIDENCE OF POTENTIAL FOR LIVER CANCER

CARBON DIOXIDE IHL-RAT TCLo: 10000 PPM/24(S)-30 DAYS CONTINUOUS 4. IHL-HMN LCLo: 9 PPM/5M 4.

### **SECTION VII - REACTIVITY DATA**

Stability:

Stable:X

May Occur:

Unstable:

Will Not Occur:X

Conditions to Avoid: NONE KNOWN.

#### Incompatibility (Materials to Avoid):

STRONG OXIDIZING AGENTS SUCH AS CHLORINE BLEACH AND CONCENTRATED HYDROGEN PEROXIDE; REDUCING AGENTS, AMINES, BASES, WATER, METAL CARBIDE, AND REACTIVE POWDERED METALS SUCH AS ZINC, SODIUM, POTASSIUM, MAGNESIUM, LITHIUM, BARIUM, AND ALUMINUM.

#### Hazardous Decomposition Products:

OXIDES OF CARBON; CHLORINE, HYDROGEN CHLORIDE, AND PHOSGENE.

Hazardous Polymerization:

Conditions to Avoid: N/A

#### SECTION VIII - SPILL OR LEAK PROCEDURES

#### Steps to be Taken if Material is Released or Spilled:

DUE TO THE NATURE OF THE AEROSOL PACKAGING, A LARGE SPILL IS UNLIKELY. FOR A SMALL SPILL, VENTILATE THE AREA, WEAR APPROPRIATE PROTECTIVE CLOTHING, ABSORB WITH AN INERT MATERIAL, AND TRANSFER ALL MATERIAL INTO A PROPERLY LABELED CONTAINER FOR DISPOSAL. USE CARE AS SPILLS MAY BE SLIPPERY.

#### Waste Disposal Method(s):

DISPOSE OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS. TYPICAL DISPOSAL IS TO WRAP THE EMPTY AEROSOL CONTAINER IN SEVERAL LAYERS OF NEWSPAPER AND DISPOSE OF IN THE TRASH. AEROSOL RECYCLING PROGRAMS ARE AVAILABLE IN MANY AREAS. DO NOT PUNCTURE OR INCINERATE THIS CONTAINER.

# **Neutralizing Agent:**

N/A

# SECTION IX - SPECIAL PROTECTION INFORMATION

# **Required Ventilation:**

LOCAL VENTILATION IS RECOMMENDED TO CONTROL EXPOSURE FROM OPERATIONS THAT CAN GENERATE EXCESSIVE LEVELS OF VAPORS OR MISTS. LOCAL VENTILATION IS PREFERRED, BECAUSE IT PREVENTS DISPERSION INTO WORK AREAS BY CONTROLLING IT AT ITS SOURCE.

# **Respiratory Protection:**

RESPIRATORS SHOULD BE SELECTED BY AND USED UNDER THE DIRECTION OF A TRAINED HEALTH AND SAFETY PROFESSIONAL FOLLOWING REQUIREMENTS FOUND IN OSHA'S RESPIRATOR STANDARD (29 CFR 1910.134) AND ANSI'S STANDARD FOR RESPIRATORY PROTECTION (Z88.2-1992). FOR CONCENTRATIONS ABOVE THE TLV AND/OR PEL BUT LESS THAN 10 TIMES THESE LIMITS, A NIOSH APPROVED HALF-FACEPIECE RESPIRATOR EQUIPPED WITH APPROPRIATE CHEMICAL CARTRIDGES MAY BE USED. FOR CONCENTRATIONS GREATER THAN 10 TIMES THE TLV AND/OR PEL, CONSULT THE NIOSH RESPIRATOR DECISION LOGIC FOUND IN PUBLICATION NO. 87-116 OR ANSI Z88.2-1992.

# **Glove Protection:**

NEOPRENE OR NITRILE RUBBER GLOVES IF REPEATED OR PROLONGED SKIN CONTACT IS LIKELY. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR HAND PROTECTION, 29 CFR 1910.138.

# **Eve Protection:**

CHEMICAL GOGGLES SHOULD BE WORN. ENSURE COMPLIANCE WITH OSHA'S PERSONAL PROTECTIVE EQUIPMENT (PPE) STANDARD FOR EYE AND FACE PROTECTION, 29 CFR 1910.133.

# Other Protection:

WEAR PROTECTIVE CLOTHING WHEN HANDLING. A SAFETY SHOWER AND AN EYEWASH STATION SHOULD BE AVAILABLE.

	SECTION X - STORAGE AND HANDLING INFORMATION				
noroturo	Indooro:V	Outdooro	Haatad	Dofrig	

Storage Temperature:	Indoors:X	Outdoors:	Heated:	Refrigerated:
Minimum Temperature:35°F		Maximum Temperatu	re:120 °F	

# Precautions to be taken in Handling and Storing:

ALWAYS STORE MATERIAL IN ITS ORIGINAL CONTAINER. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. EMPTY CONTAINERS MAY CONTAIN PRODUCT RESIDUES WHICH MAY EXHIBIT THE HAZARDS OF THE PRODUCT. TO AVOID POSSIBLE EXPLOSION DO NOT PRESSURIZE, CUT, WELD, SOLDER, DRILL, GRIND OR EXPOSE EMPTY CONTAINERS TO HEAT, HOT SURFACES, SPARKS OR OPEN FLAMES.

### Other Precautions:

KEEP OUT OF REACH OF CHILDREN. READ THE ENTIRE LABEL BEFORE USING THE PRODUCT. FOLLOW THE LABEL DIRECTIONS.

SECTION XI - REGULATORY INFORMATION				
Chemical Name	CAS Number	<u>Upper % Limit</u>		
METHYLENE CHLORIDE	75-09-2	40		
PERCHLOROETHYLENE	127-18-4	60		

Those Ingredients listed above are subject to the reporting requirements of 313 of Title III& of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

# **CALIFORNIA PROPOSITION 65**

WARNING: This product contains the following chemical(s) know to the State of Californiato cause (1)Cancer or (2)Birth Defects or other reproductive harm. THIS PRODUCT CONTAINS METHYLENE CHLORIDE(1) AND PERCHLOROETHYLENE(1).

### SECTION XII - REFERENCES

1. THRESHOLD LIMIT VALUES FOR CHEMICAL SUBSTANCES AND PHYSICAL AGENTS AND BIOLOGICAL EXPOSUR

2. OSHA PEL.

3. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES, CCINFOWeb, 2003.

4. VENDOR'S MSDS.

ALL THE COMPONENTS OF THIS PRODUCT ARE IN COMPLIANCE WITH THE TOXIC SUBSTANCES CONTROL ACT (T LEL:LOWER EXPLOSION LIMIT, UEL:UPPER EXPLOSION LIMIT, NFPA:NATIONAL FIRE PROTECTION ASSOCIATI THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE IN LIGHT OF CURRENT FORI Partsmaster, Div of NCH Corp. assumes no responsibility for personal injury or property damage caused by the use, storage, c