Material Safety Data Sheet

Brake Parts Cleaner

Aerosol

September 4, 2009

SECTION - 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Berryman Products, Inc.
3800 E. Randol Mill Rd
Arlington, TX 76011-5434
800-433-1704

Part No.: 1420
www.berrymanproducts.com
EMERGENCY TELEPHONE NUMBER
INFOTRAC (800) 535-5053

SECTION - 2 COMPOSITION INFORMATION

COMPONENT	CAS #	% BY WEIGHT
Naphtha, VM&P	8030-30-6	40 –60%
Methylene Chloride	75-09-2	30 –50%
Perchloroethylene	127-18-4	15 –25%
Carbon Dioxide	124-38-9	1 - 5%

SECTION - 3 HAZARDS INFORMATION

EMERGENCY OVERVIEW

DANGER! FLAMMABLE LIQUID, TOXIC, MARINE POLLUTANT. Vapor Can Cause Flash Fire. Vapors, Fumes and Mists are Harmful to Eyes. Harmful if Inhaled or Absorbed Through Skin. Harmful if Swallowed, ASPIRATION HAZARD. Can Cause Damage to Internal Organs. Contains material that is known to cause cancer. Wash after handling this product and before eating, smoking or using the bathroom. Promptly remove contaminated clothing and wash before reuse. Destroy contaminated leather articles. SARA Title III Reporting.

ACUTE –Effects Of Single Overexposure

EYES	Product contact with eyes can cause irritation. Vapor effects may cause eye irritation experienced as discomfort, redness or pain. Can cause moderate corneal injury and effects may be slow to heal.
SKIN	Harmful if absorbed through skin. Product contact with skin can cause irritation, itching, reddening and possible scaling and blistering.
INHALATION	Product is irritating to respiratory tract, nasal passages. Exposure can increase Carbon Monoxide level of blood can cause dizziness, drowsiness, depression, narcosis, pulmonary edema, chest pain, coughing and headache.
INGESTION	Harmful If Swallowed. Swallowing this material may cause stomach or intestinal upset with pain, central nervous system depression is possible ranging from light headedness to unconsciousness

CHRONIC –Prolonged or Repeated Overexposure

EYES	Product contact with eyes can cause irritation and corneal damage. Prolonged contact can cause conjunctivitis, blurred or dimmed vision.
SKIN	Product can be absorbed through skin and can affect Target Organs. Effects include Central Nervous System depression, narcosis and Peripheral Nervous System. Skin absorption may cause similar effects as from breathing or swallowing.
INHALATION	Product is irritating to respiratory tract and can affect Target Organs. Can increase Carbon Monoxide level of blood and cause Central Nervous System depression which can cause death. Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage sometimes referred to as "Solvent or Painter's Syndrome". Breathing high concentrations of this material in an enclosed space or by intentional abuse can cause irregular heartbeats which can cause death.
INGESTION	Harmful or Fatal If Swallowed. Can affect Target Organs. Liver, Kidney, Heart and Brain damage can occur.
ASPIRATION HAZARD	Vomiting can cause serious inflammation and accumulation of fluids in the lungs. (Pneumonitis and pulmonary edema) Aspiration into the lungs can produce severe lung damage and is a medical emergency.
TARGET ORGANS	Kidneys, Liver, Spleen, Adrenals, Eyes, Mucous Membranes, Lungs, Hearing, Heart, Blood, Skin, Central Nervous System, Peripheral Nervous System and Cardiovascular System.
CONDITIONS AGGRAVATED	Persons with Skin, Liver, Kidney or Heart problems should avoid use. Alcohol can lower the amount needed to cause health problems so avoid drinking alcohol before, during or after being exposed.

CARCINOGENIC –Product contains amounts greater than 0.1% of following.

CHEMICAL	CAS#	NTP	ACGIH	IARC	PERCENT
Methylene Chloride	75-09-2	(2) Some evidence	(A2) Suspected for human	(2B) Possible for human	30 –50%
Perchloroethylene	127-18-4	(2) Some evidence	(A3) Proven for animal	(2A) Probable for human	15 –25%

MUTAGENIC AND TERATOGENIC EFFECTS –May cause fetal and reproductive abnormalities.

CHEMICAL	CAS#	MUTAGENIC	TERATOGENIC	DEVELOPMENTAL	PERCENT
Methylene Chloride	75-09-2	Possible	Possible	Probable	30 –50%
Perchloroethylene	127-18-4	Possible	Possible	Possible	15 –25%

HAZARD RATINGS	Health	Flammability	Reactivity	Personal Protection
HMIS	3	3	0	X = Ask Supervisor

SECTION – 4 FIRST AID MEASURES

EYE CONTACT	Immediately flush eyes with cold water for at least 15 minutes while lifting upper and lower eyelids. Remove contact lenses if possible, but do not force. Obtain immediate medical attention.
SKIN CONTACT	Immediately flush skin with plenty of water for at least 15 minutes while removing any contaminated clothing or shoes. Cover the irritated skin with an emollient. Obtain medical attention if irritation persists. Wash any contaminated clothing before reuse. Destroy contaminated leather articles.
INHALATION	Remove person to fresh air, if they have problem breathing or any signs of overexposure, obtain immediate medical attention.
INGESTION	DO NOT INDUCE VOMITING. If person is fully conscious give one to two glasses of water to dilute and obtain immediate medical attention.
ASPIRATION HAZARD	If swallowed, vomiting may occur spontaneously, but DO NOT INDUCE. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Never give anything by mouth to an unconscious person. Call a physician or hospital emergency room immediately.

SECTION - 5 FIRE FIGHTING MEASURES

COMPONENT	FLASH POINT	METHOD	NFPA Class	FLAMMABILITY CLASSIFICATION
(Naphtha, VM&P)	10°C (50°F)	TAG Closed Cup	Class IB	Flammable Liquid
FLAMMABLE LIMITS	LOWER	UPPER	AUTO-IGNITION TEMPERATURE	
	1.4%	12.6%	232°C (449.6°F)	
EXPLOSION HAZARDS	Mechanical Impact		Static Discharge	
	Not Expected		Expected	

Reactive with	Acids and oxidizers such as chlorine. These include liquid bleach, sodium or calcium hypochlorite, halogens, permanganates and peroxides.
Extinguishing Media	Use DRY chemicals, CO2, alcohol foam. Water spray to cool or protect exposed materials.
Fire Fighting Procedures	May explode if ignited in an enclosed area. Flashback along vapor trail may occur.
Protective Equipment	Use MSHA/NIOSH approved self-contained breathing apparatus and full protective gear. (Full Bunker Gear)
Hazardous Decomposition	Burning or thermal decomposition can produce carbon monoxide and/or carbon dioxide and other toxic fumes.

HAZARD RATINGS	Health	Flammability	Reactivity	Specific Hazard
NFPA	2	3	0	

SECTION - 6 ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK	DANGER! FLAMMABLE LIQUID AND VAPOR. Warn personal to move away and eliminate ignition sources and ventilate area. Wear the appropriate safety equipment. Contain spill or stop the flow and absorb with an inert material and place in an appropriate waste disposal unit and dispose of in accordance with all State and Federal Guidelines and Regulations.

SECTION - 7 HANDLING AND STORAGE

HANDLING	DANGER! FLAMMABLE LIQUID, TOXIC, MARINE POLLUTANT. Avoid flame, sparks static discharge and all electric devices. Avoid inhalation of vapors or contact with eyes or skin. Do not allow material to contaminant water sources. Open container slowly to relive pressure. Keep containers closed tightly when not in use. Avoid unnecessary transfers. Keep degreasing tanks covered when not in use. Place rags used for cold cleaning in a closed container (preferably a non-aluminum, all-metal safety container) immediately after use. Can accumulate static discharge by flow or agitation. The use of explosion-proof equipment is recommended and may be required. Wash thoroughly after handling and do not wear any contaminated clothing or shoes. Destroy any contaminated leather articles.
STORAGE	Keep container tightly closed when not in use and store in a cool, well-ventilated area away for direct sunlight or any ignition sources. Use proper signage. Store only in approved containers. Keep away from incompatible materials listed in Section 10. Storage should meet OSHA and NFPA standards for Class-IB flammable liquids.

SECTION - 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS COMPONENT	ACGIH TWA8	ACGIH TWA8	OSHA PEL TWA8	OSHA PEL TWA8	ACGIH STEL	ACGIH STEL	Significant Exposure
Naphtha, VM&P	100 ppm		100 ppm				
Methylene Chloride	50 ppm A3		25 ppm		100 ppm		
Perchloroethylene	25 ppm A3		75 ppm				
Carbon Dioxide	5,000 ppm	9,000 mg/m^3	5,000 ppm	9,000 mg/m^3	30,000 ppm	54,000 mg/m^3	

SECTION - 8 EXPOSURE CONTROLS / PERSONAL PROTECTION CONTINUED

PERSONAL PROTECTION

EYES	Safety goggles or face shield.	HANDS	Inner Glove: Polyethylene /Ethylene Vinyl Alcohol
BODY	Rubber apron		Outer Glove: Nitrile or Neoprene
FEET	Rubber boots	Note:	Consult Safety Expert for Proper Gloves for "MC "
RESPIRATORY	NIOSH approved positive-pressure air supply respirator	OTHER	Vent hood, eye bath and safety shower.
VENTILATION	Ventilate to keep vapors of this material below the lowest ppm listed above. If over TLV, in accordance with 29 CFR 1910.134, use NIOSH approved positive-pressure self-contained breathing apparatus.		
HYGIENE	Wash after handling this product and before eating, smoking or using the toilet.		

Note: Alcohol can lower the amount needed to cause health problems so avoid drinking alcohol before, during or after being exposed.

SECTION - 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Liquid	pH	Not applicable
APPEARANCE	Clear	SPECIFIC GRAVITY	1.142
ODOR	Solvent	DENSITY	9.53 lb/gal
SOLUBILITY	< 1%	FREEZE POINT	Not determined
VOLATILES	100%	VAPOR PRESSURE	Not determined
V.O.C.	100%	VAPOR DENSITY	Not determined

SECTION - 10 STABILITY AND REACTIVITY

CONDITIONS TO AVOID	Heat sources
INCOMPATIBLE MATERIALS	Extremely reactive and incompatible with concentrated oxygen, acids, bases and oxidizing agents. These include liquid bleach, sodium or calcium hypochlorite, halogens, permanganates and peroxides.
THERMAL DECOMPOSITION	Burning or thermal decomposition can produce carbon monoxide and/or carbon dioxide and other toxic fumes.
HAZARDOUS POLYMERIZATION	Will not occur.

SECTION – 11 TOXICOLOGICAL INFORMATION

COMPONENT		FORM	SUBJECT	RESULT VALUE	EXPOSURE TIME
Naphtha, VM&P	LD50	Oral	Rat	5 mg/kg	4 Hr
	LD50	Skin	Rabbit	3 mg/kg	4 Hr
Methylene Chloride	LD50	Oral	Rabbit	1,900 mg/kg	
	LC50	Inhaled	Mice	16,000 ppm	
Perchloroethylene	LD50	Oral	Mice	8,850 mg/kg	
	LC50	Inhaled	Mice	6,000 ppm	
Carbon Dioxide	Toxic Effects	Inhaled	Rat	60,000 ppm	24 Hr

SECTION – 12 ECOLOGICAL INFORMATION

COMPONENT	SUBJECT	RESULT VALUE	EXPOSURE TIME
Naphtha, VM&P	Harmful to all aquatic life		
Methylene Chloride	No marine environmental information was available on this product.		
Perchloroethylene	Harmful to all aquatic life	Marine Pollutant	

SECTION - 13 DISPOSAL CONSIDERATIONS

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER.
Dispose of any waste in accordance with all State and Federal Guidelines and Regulations.

ENVIRONMENTAL FATE

This material, as supplied, when discarded or disposed of, is a hazardous waste according to Federal Regulations (40 CFR 261) due to its ignitability and due to the composition containing some or all of its components. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, weather the material is a hazardous waste.

The transportation, storage, treatment and disposal of RCRA waster material must be conducted in compliance with 40 CFR 262, 263, 264 and 270. Disposal can only occur in property permitted facilities, Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate.

SECTION - 14 TRANSPORT INFORMATION

D.O.T. CLASSIFICATION

UN NUMBER	PROPER SHIPPING NAME	n.o.s.	HAZARD CLASS
UN1992	FLAMMABLE LIQUID, TOXIC	(Naphtha, Methylene Chloride, Perchloroethylene)	3, 6.1

PACKING GROUP	LABEL CODES	REPORTABLE QUANTITY	RESPONSE CODE	MARINE POLLUTANT
PGII	Flammable liquid, Toxic	100 LBS	160	Yes

SECTION - 15 REGULATORY INFORMATION

TSCA Chemical Name	CAS No.	Sec 8(b) Inventory	Sec 8(d) Health & Safety	Sec 4(a) Chemical Test Rules	Sec 12(b) Export Notification
Naphtha, VM&P	8030-30-6	Yes			
Methylene Chloride	75-09-2	Yes	Yes	Yes	
Perchloroethylene	127-18-4	Yes	Yes	Yes	Yes
Carbon Dioxide	124-38-9	Yes			

HCS CLASSIFICATION

Flammable Liquid having a flash point lower than 23ºC (73ºF). Target organs effects. Contains material s' that can cause cancer.

REPORTABLE QUANTITIES

Chemical Name	CAS No.	Extremely Hazardous EPCRA TPQ Sec. 302	EPCRA RQ Sec. 304	Reportable Quantity CERCLA RQ Sec. 103	Emission Reporting TRI Sec. 313	RCRA Code	RMP TQ Sec112r
Methylene chloride	75-09-2			1,000	Yes	U080	
Perchloroethylene	127-18-4			100	Yes	U210	

SARA

Chemical Name	CAS No.	Sec 311 Hazardous Chemical	Sec 311 &312 Hazards Acute	Chronic	Flammable	Pressure	Reactive
Naphtha, VM&P	8030-30-6	Yes	Yes	Yes	Yes		
Methylene chloride	75-09-2	Yes	Yes	Yes			
Perchloroethylene	127-18-4	Yes	Yes	Yes			
Carbon Dioxide	124-38-9	Yes	Yes	Yes		Yes	

RIGHT TO KNOW

Chemical Name	CAS No.	State CA	CT	FL	IL	LA	NJ	NY	PA	MI	MN	MA	RI	WI
Naphtha, VM&P	8030-30-6			Yes			Yes		Yes		Yes	Yes	Yes	
Methylene chloride	75-09-2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Perchloroethylene	127-18-4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Carbon Dioxide	124-38-9						Yes	Yes	Yes					

CALIFORNIA

Proposition 65	CAS No.	WARNING! This product contains chemicals known to the state of California to cause: Birth Defects	Reproductive Harm	Carcinogen	Developmental
Methylene chloride	75-09-2	Yes	Yes	Yes	Yes
Perchloroethylene	127-18-4			Yes	

Clean Air & Water Acts

Chemical Name	CAS No.	Clean Air Acts HAP	Ozone Class 1	Ozone Class 2	Clean Water Acts HS	PP	TP
Methylene chloride	75-09-2	Yes			Yes		
Perchloroethylene	127-18-4	Yes			Yes		

INTERNATIONAL REGULATIONS - The components of this product are listed on the chemical inventories of the following countries

Chemical Name	CAS No.	Australia	Canada	Europe (EINECS)	Japan	Korea	UK
Methylene chloride	75-09-2	Yes	Yes	Yes	Yes	Yes	Yes
Perchloroethylene	127-18-4	Yes	Yes	Yes	Yes	Yes	Yes

DSCL (EEC)	Code	Definition (Risk-Phrases / Safety-Phrases)
	R11	Highly Flammable
	R36/38	Irritating to eyes and skin.
	R37/38	Irritation to respiratory system and skin.
	R27/28	Very toxic in contact with skin and if swallowed.
	R65	Harmful: may cause lung damage if swallowed.
	S1/2	Keep locked up and out of the reach of children.
	S16	Keep away from sources of ignition. No Smoking.
	S23	Do not breathe fumes, vapors or spray
	S36/37	Wear suitable protective clothing and gloves
	S61	Avoid release to the environment. Refer to special instructions/safety data sheet
	S62	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

WHMIS Classification

Chemical name	DSL	Class	Definition
Naphtha, VM&P	Yes	B2	Flammable liquid with a flash point lower than 37.8ºC (100ºF)
Methylene chloride	Yes	D2B	Materials Causing Other Toxic Effects - Toxic Material
Perchloroethylene	Yes	D2B	

SOURCE INFORMATION	CHEMICAL	CAS NO.	REVISION DATE
Sciencelab	Naphtha, VM&P	8030-30-6	10/10/2005
Conchemco, LTD	Methylene chloride	75-09-2	11/12/2006
Conchemco, LTD	Perchloroethylene	127-18-4	11/12/2006

MSDS Legend

ACGIH	=	American Conference of Governmental Industrial Hygienists	NFPA	=	National Fire Protection Association
CAS	=	Chemical Abstracts Service Registry	n.o.s.	=	Not Otherwise Specified
CEILING	=	Ceiling Limit (15 minutes)	NTP	=	National Toxicology Program
CERCLA	=	The Comprehensive Environmental Response, Compensation, and Liability Act	OSHA	=	Occupational Safety and Health Administration
EPA	=	Environmental Protection Agency	PEL	=	Permissible Exposure Limit (OSHA)
HAP	=	Hazard Air Pollutant	PP	=	Priority Pollutant
HMIS	=	Hazardous Materials Identification System	SARA	=	Superfund Amendments and Reauthorization Act
HS	=	Hazardous Substance	STEL	=	Short Term Exposure Limit (15 minutes)
IARC	=	International Agency for Research on Cancer	TLV	=	Threshold Limit Value (ACGIH)
LEL	=	Lower Explosive Limit	TP	=	Toxic Pollutant
NE	=	Not Established	TWA	=	Time Weighted Average (8 hours)
			UEL	=	Upper Explosive Limit
			WHMIS	=	Worker Hazardous Materials Information System (Canada)

DISCLAIMER