



CHEMICAL TECHNOLOGIES INC.

P.O. Box 91055
TORONTO, ON
M9C 5N5
Tel: 416-848-3917
Fax: 647-430-3455

MATERIAL SAFETY DATA SHEET

DRY LUBE

SECTION 1 MATERIAL IDENTIFICATION

WHMIS CLASSIFICATION	WHMIS CLASS A, B5, D2B
HMIS	HEALTH 2, FLAMMABILITY 4, REACTIVITY 1, PERSONAL PROTECTION B
CHEMICAL FORMULA	MIXTURE
MOLECULAR WEIGHT	NOT APPLICABLE
MATERIAL USE	LUBRICANT

SECTION 2 HAZARDOUS INGREDIENTS OF MATERIAL

HAZARDOUS INGREDIENT	ISOPROPYL ALCOHOL
APPROX. CONCENTRATION %	1-5
CAS	67-63-0
EXPOSURE LIMITS	TWA: 400 CEIL: 500 (PPM) TWA: 900 CEIL: 1225 (MG/M ³)
LD50/LC50/SPECIES/ROUTE	ORAL (LD50): ACUTE: 3600 MG/KG (MOUSE) VAPOUR (LC50) ACUTE 16970 PPM 4 HOURS (RAT)
HAZARDOUS INGREDIENT	ACETONE
APPROX. CONCENTRATION %	10-30
CAS	67-64-1
EXPOSURE LIMITS	TWA: 1000 PPM
LD50/LC50/SPECIES/ROUTE	ORAL (LD50): ACUTE: 3000 MG/KG (MOUSE) DERMAL (LD50): ACUTE 20000 MG/KG (RABBIT) VAPOUR (LC50) ACUTE 29853 PPM 4 HOURS (RAT)
HAZARDOUS INGREDIENT	LIQUEFIED PETROLEUM GAS
APPROX. CONCENTRATION %	10-30
CAS	68476-85-7
EXPOSURE LIMITS	TWA: 1000 CEIL: 1250 (PPM) TWA: 1800 CEIL: 2250 (MG/M ³)
LD50/LC50/SPECIES/ROUTE	NOT AVAILABLE
HAZARDOUS INGREDIENT	NORMAL HEPTANE
APPROX. CONCENTRATION %	30-60
CAS	142-82-5
EXPOSURE LIMITS	NOT AVAILABLE
LD50/LC50/SPECIES/ROUTE	NOT AVAILABLE

SECTION 3 PHYSICAL DATA FOR MATERIAL

PHYSICAL STATE	AEROSOL
ODOUR AND APPEARANCE	ACETONE ODOUR, MILKLY LIQUID
ODOUR THRESHOLD (PPM)	NOT AVAILABLE
SPECIFIC GRAVITY	0.73 (WATER=1)
VAPOUR PRESSURE (MM)	WEIGHTED AVERAGE 37.65 MM OF HG (@20°C)
VAPOUR DENSITY (AIR =1)	GREATER THAN AIR.

EVAPORATION RATE	0.75 (BUTYL ACETATE = 1)
BOILING POINT (°C)	56° C (132.8° F)
FREEZING POINT (°C)	NOT DETERMINED
SOLUBILITY IN WATER (20°C)	MISCIBLE
% VOLATILE (BY VOL.)	98.8
PH	NOT APPLICABLE

SECTION 4 FIRE AND EXPLOSION DATA

FLAMMABILITY	EXTREMELY FLAMMABLE
MEANS OF EXTINCTION	FLAMMABLE LIQUID, MISCIBLE IN WATER. SMALL FIRE: USE DRY CHEMICALS, CO ₂ , ALCOHOL FOAM OR WATER SPRAY.
SPECIAL PROCEDURES	SELF-CONTAINED RESPIRATORY PROTECTION SHOULD BE PROVIDED FOR FIREFIGHTERS.
FLASHPOINT (°C) AND METHOD	CLOSED CUP: (TAGLIBUE) -17.8° C (0° F) (ACETONE)
UPPER EXPLOSION LIMIT (% BY VOL.)	LOWER THAN 13
LOWER EXPLOSION LIMIT (% BY VOL.)	1.1
HAZARDOUS COMBUSTION PRODUCTS	OXIDES OF CARBON.
EXPLOSION SENSITIVITY TO CHEM. IMPACT	RISKS OF EXPLOSION OF THE PRODUCT IN PRESENCE OF MECHANICAL IMPACT.

SECTION 5 REACTIVITY DATA

CHEMICAL STABILITY	STABLE
INCOMPATIBILITY? TO WHAT?	REACTIVE WITH OXIDIZING AGENTS, REDUCING AGENTS. SLIGHTLY REACTIVE TO REACTIVE WITH ACIDS, ALKALIS AND MOISTURE.
HAZARDOUS DECOMPOSITION PRODUCTS	NOT AVAILABLE

SECTION 6 TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY SKIN CONTACT Y/N	Y
ROUTE OF ENTRY EYE CONTACT Y/N	Y
ROUTE OF ENTRY INHALATION Y/N	Y
ROUTE OF ENTRY INGESTION Y/N	Y
EFFECTS OF ACUTE EXPOSURE	HAZARDOUS IN CASE OF SKIN CONTACT (IRRITANT, PERMEATOR AND SENSITIZER), OF EYE CONTACT (IRRITANT). HAZARDOUS IN CASE OF INGESTION AND OF INHALATION. SEVERE OVER-EXPOSURE CAN RESULT IN DEATH. INFLAMMATION OF THE EYE IS CHARACTERIZED BY REDNESS, WATERING AND ITCHING.
EFFECTS OF CHRONIC EXPOSURE	THE SUBSTANCE IS TOXIC TO BLOOD, KIDNEYS, LUNGS, LIVER AND THE REPRODUCTIVE SYSTEM. REPEATED OR PROLONGED EXPOSURE TO THE SUBSTANCE CAN PRODUCE TARGET ORGAN DAMAGE. REPEATED EXPOSURE TO A HIGHLY TOXIC MATERIAL MAY PRODUCE GENERAL DETERIORATION OF HEALTH BY AN ACCUMULATION IN ONE OR MORE HUMAN ORGANS.
SYNERGISTIC MATERIALS	NOT AVAILABLE

CARCINOGENICITY Y/N	Y A5 (SUSPECTED FOR HUMAN) BY ACGIH (ACETONE).
REPRODUCTIVE EFFECTS Y/N	N
TERATOGENCITY Y/N	N
MUTAGENICITY Y/N	N

SECTION 7 PREVENTIVE MEASURES

GLOVES	IMPERVIOUS GLOVES
EYEWEAR	SAFETY GLASSES
FOOTWEAR	AS REQUIRED BY EMPLOYER CODE
CLOTHING	AS REQUIRED BY EMPLOYER CODE
ENGINEERING CONTROLS	GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT TO CONTROL AIRBORNE LEVELS.
LEAK AND SPILL PROCEDURE	ABSORB WITH AN INERT MATERIAL AND PLACE IN AN APPROPRIATE WASTE DISPOSAL CONTAINER.
WASTE DISPOSAL	CONSULT YOUR LOCAL OR REGIONAL AUTHORITIES.
STORAGE REQUIREMENTS	KEEP IN A COOL WELL-VENTILATED PLACE. KEEP AWAY FROM HEAT, SPARKS AND FLAME. DO NOT PUNCTURE, INCINERATE, STORE THE CONTAINER AT TEMPERATURES ABOVE 49°C (120°F) OR IN DIRECT SUNLIGHT.

SECTION 8 FIRST AID MEASURES

SKIN	WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. COMPLETELY DECONTAMINATE CLOTHING, SHOES AND LEATHER GOODS BEFORE REUSE OR DISCARD.
EYE	IMMEDIATELY FLUSH EYES WITH RUNNING WATER FOR AT LEAST 15 MINUTES, KEEPING EYELIDS OPEN. IF IRRITATION PERSISTS SEEK MEDICAL ATTENTION.
INHALATION	REMOVE TO FRESH AIR. OXYGEN MAY BE ADMINISTERED IF BREATHING IS DIFFICULT. IF THE VICTIM IS NOT BREATHING, PERFORM MOUTH-TO-MOUTH RESUSCITATION. KEEP PERSON WARM, QUIET AND GET MEDICAL ATTENTION.
INGESTION	DO NOT INDUCE VOMITING. HAVE CONSCIOUS PERSON DRINK SEVERAL GLASSES OF WATER OR MILK. NEVER GIVE AN UNCONSCIOUS PERSON ANYTHING TO INGEST. ASPIRATION OF MATERIAL INTO THE LUNGS DUE TO VOMITING CAN CAUSE CHEMICAL PNEUMONITIS, WHICH CAN BE FATAL. SEEK IMMEDIATE MEDICAL ATTENTION.

*VALIDATED BY YORK CHEMICAL TECHNOLOGIES INC
ON 30/04/2010*

WHILE THE COMPANY BELIEVES THE DATA SET FORTH HEREIN ARE ACCURATE AS OF THE DATE HEREOF, THE COMPANY MAKES NO WARRANTY WITH RESPECT THERETO AND EXPRESSLY DISCLAIMS ALL LIABILITY FOR RELIANCE THEREON. SUCH DATA ARE OFFERED SOLELY FOR YOUR CONSIDERATION, INVESTIGATION AND VERIFICATION.