

SAFETY DATA SHEET (SDS)

Section 1. Identification								
Product identific	er	BIO-CHAIN	2002	011 10 1010110	224441011			
Other means of	identific	ation 493						
Recommended u	se and r	estrictions on use	LUBRICANT					
Initial supplier identifier PROLAB TECHNOLUB INC. 4531 RUE INDUSTRIELLE, THETFORD MINES, (QUEBEC), G6H 2J1,								
CANADA TEL. (418) 423-2777 FAX : (418) 423-7619								
Emergency telephone number/restriction on use Canada – CANUTEC 24 hour number 613-996-6666								
Section 2. Hazard identification								
Classification of hazardous product (name of the category or subcategory of the hazard class)								
NOT REGULAT	ED							
Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)								
None								
Other hazards k				erials such as rags used with this product may begin to burn by themselves. After				
	use, put rags in water or lay flat to dry, then discard.							
Section 3. Composition/information on ingredients								
	(commo	n name/synonyms)			CAS number or other	Concentration (%)		
Castor oil				8001-79-4	15-40			
		Section 4. First-aid measures						
Inhalation			son to fresh air and	l keep comfo	rtable for breathing. Call a doctor if y			
Inhalation Ingestion	IF SW	ALLOWED: Immed	son to fresh air and liately call a doctor	l keep comfo r. DO NOT I	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give	anything by mouth if victim is		
	IF SW rapidly	ALLOWED: Immed losing consciousnes	son to fresh air and liately call a doctor s, or is unconscious	l keep comfo r. DO NOT I s or convulsin	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give g. Rinse mouth thoroughly with wate	anything by mouth if victim is		
Ingestion	IF SW rapidly of water	ALLOWED: Immed losing consciousnes er. If vomiting occurs	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vi	l keep comfo r. DO NOT I s or convulsin ctim lean for	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ig. Rinse mouth thoroughly with wate ward to reduce risk of aspiration.	anything by mouth if victim is		
Ingestion Skin contact	IF SW rapidly of wate If skin	ALLOWED: Immed losing consciousnes or. If vomiting occurs irritation occurs: Ge	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vi t medical attention	l keep comfo r. DO NOT I s or convulsin ctim lean for . Rinse skin v	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ig. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes).	anything by mouth if victim is r. Have victim drink two glasses		
Ingestion	IF SW rapidly of wate If skin IF IN I	ALLOWED: Immed losing consciousnes or. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou	son to fresh air and liately call a doctor is, or is unconscious s naturally, have vi t medical attention sly with water for s	I keep comfor. DO NOT Its or convulsing the convulsing the convulsing the convulsing the conversion of	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ig. Rinse mouth thoroughly with wate ward to reduce risk of aspiration.	anything by mouth if victim is r. Have victim drink two glasses		
Ingestion Skin contact Eye contact	IF SW rapidly of wate If skin IF IN I rinsing	ALLOWED: Immed losing consciousnes or. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou. If eye irritation per	son to fresh air and liately call a doctor is, or is unconscious s naturally, have vi t medical attention sly with water for s sists: Get medical a	I keep comfor. DO NOT I sor convulsing tim lean for. Rinse skin vereral minutattention.	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ag. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes). es (5-10). Remove contact lenses, if p	anything by mouth if victim is r. Have victim drink two glasses		
Ingestion Skin contact Eye contact Most important	IF SW rapidly of water If skin IF IN IF rinsing sympton	ALLOWED: Immed losing consciousnes er. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou. If eye irritation per ns and effects (acut	son to fresh air and liately call a doctor is, or is unconscious is naturally, have vi t medical attention sly with water for s sists: Get medical a e or delayed)	I keep comfor. DO NOT I so or convulsing the convulsing the convulsing the convulsing the convulsing the convulsion. It is a convulsion to the convulsion in	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ag. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes). es (5-10). Remove contact lenses, if pure ye/skin irritation.	anything by mouth if victim is r. Have victim drink two glasses present and easy to do. Continue		
Ingestion Skin contact Eye contact Most important	IF SW rapidly of water If skin IF IN IF rinsing sympton	ALLOWED: Immed losing consciousnes er. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou. If eye irritation per ns and effects (acut	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vi t medical attention sly with water for s sists: Get medical a e or delayed) pecial treatment	I keep comfor. DO NOT I so or convulsing ctim lean for a Rinse skin very ceveral minute attention. Transient e In all cases.	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ag. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes). es (5-10). Remove contact lenses, if purely skin irritation.	anything by mouth if victim is r. Have victim drink two glasses present and easy to do. Continue		
Skin contact Eye contact Most important Indication of im	IF SW rapidly of wate If skin IF IN I rinsing symptor mediate	ALLOWED: Immed losing consciousnes or. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou. If eye irritation per ns and effects (acut medical attention/s	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vi t medical attention sly with water for s sists: Get medical a e or delayed) pecial treatment Section 5.	I keep comfor. DO NOT I so or convulsing ctim lean for a Rinse skin variety and the catendary attention. Transient e In all cases. Fire-fighti	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ag. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes). es (5-10). Remove contact lenses, if paye/skin irritation. , call a doctor. Do not forget this doctor measures	anything by mouth if victim is r. Have victim drink two glasses present and easy to do. Continue		
Skin contact Eye contact Most important Indication of im Specific hazards	IF SW rapidly of water If skin IF IN I rinsing symptor mediate	ALLOWED: Immed losing consciousnes er. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou. If eye irritation per ns and effects (acut	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vi t medical attention sly with water for s sists: Get medical a e or delayed) pecial treatment Section 5. hazardous combu	I keep comfor. DO NOT I so or convulsing ctim lean for a Rinse skin variety and the catendary attention. Transient e In all cases. Fire-fighti	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ag. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes). es (5-10). Remove contact lenses, if paye/skin irritation. , call a doctor. Do not forget this doctor measures	anything by mouth if victim is r. Have victim drink two glasses present and easy to do. Continue		
Skin contact Eye contact Most important Indication of im Specific hazards Carbon oxides an	IF SW rapidly of water If skin IF IN IF rinsing sympton mediate	ALLOWED: Immed losing consciousnes er. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou. If eye irritation per ns and effects (acut medical attention/s	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vit medical attention sly with water for s sists: Get medical a e or delayed) pecial treatment Section 5. hazardous combud fumes.	I keep comfor. DO NOT I so or convulsing ctim lean for a Rinse skin variety and the catendary attention. Transient e In all cases. Fire-fighti	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ag. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes). es (5-10). Remove contact lenses, if paye/skin irritation. , call a doctor. Do not forget this doctor measures	anything by mouth if victim is r. Have victim drink two glasses present and easy to do. Continue		
Skin contact Eye contact Most important Indication of im Specific hazards Carbon oxides an Suitable and uns	IF SW rapidly of wate If skin IF IN I rinsing symptom diate of the had other is suitable of the suitable of th	ALLOWED: Immed losing consciousnes er. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou . If eye irritation per us and effects (acut medical attention/s azardous product (1 critant/toxic gases an extinguishing media	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vist medical attention sly with water for s sists: Get medical at e or delayed) pecial treatment Section 5. hazardous combud fumes.	I keep comfor. DO NOT I so or convulsing ctim lean for a Rinse skin was everal minute attention. Transient e In all cases. Fire-fightistion produce	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give ag. Rinse mouth thoroughly with wate ward to reduce risk of aspiration. with water (5-10 minutes). es (5-10). Remove contact lenses, if paye/skin irritation. , call a doctor. Do not forget this doctor measures	anything by mouth if victim is r. Have victim drink two glasses present and easy to do. Continue ument.		
Skin contact Eye contact Most important Indication of im Specific hazards Carbon oxides an Suitable and uns In case of fire: Us	IF SW rapidly of wate If skin IF IN I rinsing symptom mediate of the had other is suitable as carbon	ALLOWED: Immed losing consciousnes er. If vomiting occurs irritation occurs: Ge EYES, Rinse cautiou . If eye irritation per us and effects (acut medical attention/s azardous product (1 critant/toxic gases an extinguishing media	son to fresh air and liately call a doctor s, or is unconscious s naturally, have vi t medical attention sly with water for s sists: Get medical a e or delayed) pecial treatment Section 5. hazardous combut d fumes. A owder agent and a	I keep comfor. DO NOT I sor convulsing ctim lean for a Rinse skin was everal minute attention. Transient e In all cases. Fire-fightistion produce	rtable for breathing. Call a doctor if y NDUCE VOMITING. NEVER give to the series of t	anything by mouth if victim is r. Have victim drink two glasses present and easy to do. Continue ument.		

During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).

Methods and materials for containment and cleaning up

Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

Section 7. Handling and storage

Precautions for safe handling

Wear gloves/protective clothing/eye protection/face protection.

Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapours or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks.



Section 8. Exposure controls/Personal protection

Control parameters (biological limit values or exposure limit values and source of those values)

Exposure limits: None

Appropriate engineering controls

Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Individual protection measures/personal protective equipment

Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. Wash hands/nails/face thoroughly after handling. Do not eat, drink or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use.

Section 9. Physical and chemical properties							
Appearance, physical state/colour Yellow liquid	Vapour pressure Not available						
Odour Oil	Vapour density Not available						
Odour threshold Not available	Relative density 0.9402						
pH Not available	Solubility Not available						
Melting/freezing point -38°C	Partition coefficient - n-octanol/water Not available						
Initial boiling point/range Not available	Auto-ignition temperature Not available						
Flash point > 300 °C	Decomposition temperature Not available						
Evaporation rate Not available	Viscosity 75.2 cSt @ 40°C						
Flammability (solids and gases) Not available	VOC Not available						
Upper and lower flammability/explosive limits Not available	Other None known						

Section 10. Stability and reactivity

Reactivity

Does not react under the recommended storage and handling conditions prescribed.

Chemical stability

Stable under the recommended storage and handling conditions prescribed.

Possibility of hazardous reactions

DANGER OF COMBUSTION - Materials such as rags used with this product may begin to burn by themselves. After use, put rags in water or lay flat to dry, then discard.

Conditions to avoid (static discharge, shock or vibration)

DANGER OF COMBUSTION - Materials such as rags used with this product may begin to burn by themselves. After use, put rags in water or lay flat to dry, then discard.

Incompatible materials

Oxidizing materials; etc.

Hazardous decomposition products

None known

Section 11. Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)

May cause transient eye/skin irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing.

Delayed and immediate effects (chronic effects from short-term and long-term exposure)

Skin Sensitization – No data available;

Respiratory Sensitization – No data available;

Germ Cell Mutagenicity – No data available;

Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA;

Reproductive Toxicity – No data available;

Specific Target Organ Toxicity — Single Exposure – No data available; Specific Target Organ Toxicity — Repeated Exposure – No data available;

Aspiration Hazard – No data available;

Health Hazards Not Otherwise Classified - No data available;

Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀)

None

ATE not available in this document.



WHMIS

Energy efficiend	DATE & VERSION – APRIL 09, 2018						
Energy ejjiweni							
Section 12. Ecological information							
	uatic and terrestrial information)						
	e for the product.						
Persistence and							
Bioaccumulativ	re potential No data available						
Mobility in soil	No data available						
Other adverse e							
	Section 13. Disposal considerations						
	Information on safe handling for disposal/methods of disposal/contaminated packaging						
Dispose of contents/container into safe container in accordance with local, regional or national regulations.							
Section 14. Transport information							
	oper shipping name; Class(es); Packing group (PG) of the TDG Regulations						
NOT REGULAT							
UN number; Pr	oper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)						
NOT REGULAT	ΓED						
UN number; Pr	oper shipping name; Class(es); Packing group (PG) of the IATA (air)						
NOT REGULAT							
	ions (transport/conveyance) None						
	hazards (IMDG or other) None						
	(usually more than 450 L in capacity) Possible						
Duik transport							
G 6 (// 1/1 G	Section 15. Regulatory information						
Safety/health C	anadian regulations specifics Refer to Section 2 for the appropriate classification. This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).						
Environmental	Canadian regulations specifics Refer to Section 3 for ingredient(s) of the DSL						
Safety/health/er	nvironmental outside regulations specifics						
	SHA information: This product is regulated according to OSHA (29 CFR).						
	PA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14.						
	CSA information: Refer to the ingredients listed in Section 3.						
	otection Association (NFPA):						
HEALTH: 0 FLAMMABILITY: 1 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3.							
	LE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe						
California Propos	sition 65: This product may contain traces of a material known to the State of California to cause cancer or other reproductive harm.						
Currorma i ropo	Section 16. Other information						
Data of the later							
	st revision of the safety data sheet April 09, 2018 version 1 (NSS ENTREPRISE INC.)						
References	Safety Data Sheets from manufacturer/supplier & from Canadian Centre for Occupational Health and Safety, CCOHS.						
Abbreviations							
ACGIH	American Conference of Governmental Industrial Hygienists						
ATE	Acute toxicity estimate						
CAS	Chemical Abstract Service						
DSL	Domestic Substance List						
IARC	International Agency for Research on Cancer						
IATA	International Air Transport Association						
IMDG	International Maritime Dangerous Goods Code						
LC	Lethal concentration						
LD	Lethal Dosage						
NIOSH	National Institute for Occupational Safety and Health						
NTP	National Toxicology Program (U.S.A.)						
OSHA	Occupational Safety and Health Administration (U.S.A.)						
PEL	Permissible Exposure Limit						
STEL	Short-term Exposure Limit						
TDG	Transport of dangerous goods in Canada						
TLV	Threshold Limit Value Toxic Substances Control Act						
TSCA							
TWA	Time Weighted Average Workplace Heggerdaus Materials Information System						
I M/HM/HS	Workplace Hererdone Materials Intermetion System						

The information presented herein has been compiled from sources considered dependable and is accurate to the best of **PROLAB TECHNOLUB INC.**'s knowledge. **PROLAB TECHNOLUB INC.** Makes no warranty whatever expresses or implied of merchantability or fitness for the particular purpose. The information relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Customers are encouraged to conduct their own tests. Before using the product, read its label. **PROLAB TECHNOLUB INC.** Assumes no responsibility for injury to recipient or to third persons or for any damage to any property and recipient assumes all such risks.

Workplace Hazardous Materials Information System