SAFETY DATA SHEET

1 – IDENTIFICATION

IDENTIFIER	ENGINE DEGREASER
PRODUCT CODE	3500, 3501, 3503, 3503-1
RECOMMENDED USE	Engine degreaser.
RESTRICTIONS ON USE	Use only in well ventilated areas.
SUPPLIER / MANUFACTURER	AUTO-CHEM INC 33 de Lyon Repentigny, QC J5Z 4Z3 450-654-9292 www.autochem.com
EMERGENCY TELEPHONE	CANUTEC 1-613-996-6666 (24 hours)

2 – HAZARD IDENTIFICATION

CLASSIFICATION	Flammable liquids 3 Skin irritation 2 Eye irritation 2A Aspiration 1 Specific target organ toxicity Single exposure 3 : Narcotic effect Specific target organ toxicity Single exposure 3 : Respiratory tract irritation Hazardous to the aquatic environment, acute hazard 3	
LABEL ELEMENTS		
SIGNAL WORD	DANGER	
HAZARD STATEMENT	H226 H304 H315 H335 H336 H402	Flammable liquid and vapour. May be fatal if swallowed and enters airways. Causes skin irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful to aquatic life.
PRECAUTIONARY STATEMENTS – PREVENTION	P210 P233 P240 P241 P242 P243 P264 P280	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tolls. Take action to prevent static discharges. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye

	P301+P310 P331 P261 P271 P273	protection/face protection. IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment.
PRECAUTIONARY STATEMENTS – RESPONSE	P303+P361+P353 P332+P313 P362+P364 P370+P378 P304+P340 P312 P391	IF ON SKIN: take off immediately all contaminated clothing. Rinse skin with water (or shower). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire, use chemical foam to extinguish. IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. Collect spillage.
PRECAUTIONARY STATEMENTS – STORAGE	P403+P235 P405	Store in a well-ventilated place. Keep cool. Store locked up.
PRECAUTIONARY STATEMENTS - ELIMINATION	P501	Dispose contents/containers according to municipal, provincial and federal regulations.
OTHER HAZARDS	Not applicable	

3 – COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	C.A.S	CONCENTRATION
Light aromatic naphtha solvent	64742-95-6	30 – 60 *
Medium aliphatic naphtha solvent	64742-88-7	15 – 40 *
Secondary ethoxylated alcohol	84133-50-6	5 – 10 *
Primary ethoxylated alcohol	37251-67-5	5 – 10 *
Isopropylic alcohol	67-63-0	1 – 5 *
Ethylene glycol monobutyl ether	111-76-2	1 – 5 *

* TRADE SECRET STATEMENT: The exact concentration of composition has been withheld as a trade secret.

4 – FIRST AID MEASURES

ROUTE OF EXPOSURE	Inhalation, eyes, skin, ingestion

INHALATION	IF INHALED: remover person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CONTROL CENTER or physician.
DERMAL	IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
OCULAR	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
ORAL	NEVER give anything orally if victim is losing consciousness, is unconscious or having convulsions. Rinse mouth with water thoroughly. DO NOT INDUCE VOMITING. Ask victim to drink two glasses of water. If vomiting occurs naturally, lean victim forward to reduce risks of aspiration. Continue

	to drink water. Obtain medical care.
NOTE TO PHYSICIAN	Specific treatment: Treat symptomatically. This product contains materials that may cause severe pneumonitis if aspirated. If there are less than two hours since ingestion occurred, carry out careful gastric lavage. If possible, use an endotracheal tube to prevent aspiration. Keep the patient under observation for signs of respiratory difficulty from aspiration pneumonia. Practice resuscitation and appropriate chemical therapy to cases of respiratory decline.

5 – FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Large fire: water spray, fog or regular foam. Small fire: dry chemical, CO2, water spray or regular foam.
UNSUITABLE EXTINGUISHING MEDIA	No data.
SPECIFIC HAZARDS	Heat builds up pressure in closed containers. Cool with water stream. Hazardous combustion products: carbon oxides, acrid smoke, irritating fumes.
PROTECTIVE EQUIPMENT	Fire-fighters must wear protective equipment and NIOSH approved self-contained breathing apparatus.
PRECAUTIONS	Do not let water run-off reach sewers, ditches or waterways.

6 – ACCIDENTAL RELASE MEASURES

PROTECTIVE EQUIPMENT	Wear appropriate respiratory equipment (See Section 8). Avoid direct contact with product. Remove non-essential personnel.
CONTAINMENT AND CLEAN UP	Ventilate spill area. Stop spill if safe to do so. Contain and absorb with an inert absorbing material for future disposal (See Section 13). Prevent spill from entering sewers or waterways. Retain water run-off if applicable. Inform proper authorities if necessary.
ENVIRONMENTAL PRECAUTIONS	Avoid entering sewers, waterways or restricted areas. Eliminate according to municipal, provincial and federal regulations.

7 – HANDLING AND STORAGE

HANDLING	Keep away from heat, sparks and flame. Do not smoke. Vapours of this material are heavier than air and will collect in low or confined area. Do not cut, drill, grind, weld or perform similar operations near container. Static electricity may accumulate and create a fire hazard. Take precautionary measures against static charges. Bond and ground all transfer containers and equipment. Ground fixed equipment. Containers must be identified correctly. Handle in a well ventilated area. Avoid breathing dust, vapours or mists. Avoid contact with eyes, skin and clothes. Keep containers closed when not in use. Empty containers may contain residues and must be handled as hazardous waste. Maintain good personal hygiene before eating, drinking or smoking. Do not eat, drink or smoke while using the product or in proximity. Wash contaminated clothing before reuse.
STORAGE	Store in a well-ventilated place, away from heat and ignition sources. Keep cool. Store away from incompatible materials. Keep containers closed.
INCOMPATIBLE MATERIALS	Acids, alkalis, strong oxidizing agents.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CHEMICAL NAME	C.A.S.	SOURCE	VALUE
Light aromatic naphtha solvent	64742-95-6	NIOSH NIOSH OSHA	TWA 350 mg/m3 CEIL 1800 mg/m3 TWA 500 ppm (2000 mg/m3)
Medium aliphatic naphtha solvent	64742-88-7	ACGIH OSHA	CEIL 100 ppm CEIL 100 ppm
Secondary ethoxylated alcohol	84133-50-6		No established limits.
Primary ethoxylated alcohol	37251-67-5		No established limits.
Isopropylic alcohol	67-63-0	ACGIH ACGIH NIOSH NIOSH OSHA OSHA CSST CSST	TWA 200 ppm STEL 400 ppm TWA 400 ppm (980 mg/m3) STEL 500 ppm (1255 mg/m3) TWA 400 ppm (980 mg/m3) DIHL 2000 ppm TWA 400 ppm (980 mg/m3) STEL 500 ppm (1255 mg/m3
Ethylene glycol monobutyl ether	111-76-2	CSST ACGIH NIOSH-REL	TWA 20 ppm (97 mg/m3) TWA 20 ppm TWA 5ppm (24 mg/m3)

ENGINEERING CONTROLS	Use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels to an acceptable level.
RESPIRATORY PROTECTION	Maintain atmospheric concentrations below exposure limits. If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use a NIOSH approved supplied air respirator.
PROTECTIVE EQUIPMENT AND CLOTHING	Wear chemical / impermeable gloves or other protective clothing to prevent repeated or continuous contact with the skin during handling and usage. Wear goggles to prevent mist, vapours or dust to contact eyes. Insure that eyewash stations, showers and cleaning stations are near to work station.
OCULAR PROTECTION	Chemical goggles; also wear a face shield if splashing hazard exists.
GENERAL HYGIENE RECOMMENDATIONS	Ensure that eyewash stations and safety showers are proximal to the work-station location. Avoid production of high concentrations of dust, vapours or mists. Avoid contact with skin and eyes. Avoid breathing dust, vapours or mists. Never eat, drink or smoke near work stations. Good hygiene is recommended after using this product. Clean clothing before reuse.

9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid, transparent, amber
ODOUR	Solvent.
ODOUR TRESHOLD	Not available.
pH (10% in water)	6.65
MELTING / FREEZING POINT	Not available.
INITIAL BOILING POINT	Not available.

FLASH POINT (closed cup)	30.0°C
EVAPORATION RATE (n-butyl acetate=1)	Not available.
FLAMMABILITY	
LOWER FLAMMABLE/EXPLOVISE LIMIT (%)	Not available.
UPPER FLAMMABLE/EXPLOSIVE LIMIT (%)	Not available.
VAPOUR PRESSURE	Not available.
VAPOUR DENSITY (air=1)	Not available.
RELATIVE DENSITY	0.819
SOLUBILITY (in water)	Not soluble.
PARTITION COEFFICIENT (n-octanol/water)	Not available.
AUTO-IGNITION TEMPERATURE	Not available.
DECOMPOSITION TEMPERATURE	Not available.
VOC (w/w)	646.1 g/L (07889 Kg/Kg)
VISCOSITY	< 50 cps

10 – STABILITY AND REACTIVITY

REACTIVITY	Stable under recommended usage.
CHEMICAL STABILITY	Stable under normal temperatures and pressures.
HAZARDOUS REACTIONS	Hazardous polymerization will not occur.
CONDITIONS TO AVOID	Heat, ignition sources, incompatible materials.
INCOMPATIBLE MATERIALS	Acids, alkalis, strong oxidants.
HAZARDOUS DECOMPOSITION PRODUCTS	Hazardous decomposition will not occur.

11 – TOXICOLOGICAL INFORMATION

ACUTE EFFECTS			
INHALATION	May cause respiratory irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.		
DERMAL	Causes skin irritation.		
OCULAR	Causes serious eye irritation.		
ORAL	Material may be aspirated into the lungs during ingestion and/or subsequent vomiting. Aspiration of the material will cause severe lung injury, chemical pneumonitis, pulmonary oedema or death.		
CHRONIC EFFECTS			
INHALATION	No data.		
DERMAL	No data.		
OCULAR	No data.		
ORAL	No data.		
ADDITIONAL INFORMATION			
CARCINOGENIC EFFECTS (IARC)	Isopropylic alcohol	67-63-0	Group 3 : Not classifiable as to its

			carcinogenicity to humans
	Ethylene glycol monobutyl ether	111-76-2	Group 3 : Not classifiable as to its carcinogenicity to humans
MUTAGENIC EFFECTS	No data.		
TERATOGEN EFFECTS	No data.		
REPRODUCTION	No data.		
SENSIBILISATION	No data.		
TARGET ORGANS	Respiratory tract, central nervous system.		
SYNERGISTIC SUBSTANCES	None known.		

CHEMICAL NAME	C.A.S.	LD50 ORAL mg/kg	LD50 DERMAL mg/kg	LC50 INHALATION
Light aromatic naphtha solvent	64742-95-6	8400, rat	>2000, rabbit	> 5.2, rat, 4hr
Medium aliphatic naphtha solvent	64742-88-7	> 6216, rat	>3108, rabbit	> 14.1, rat, 4hr
Secondary ethoxylated alcohol	84133-50-6	> 3000, rat	> 2000, rabbit	No data.
Primary ethoxylated alcohol	37251-67-5	> 5000, rat	No data.	No data.
Isopropylic alcohol	67-63-0	>4710, rat	>12870, rabbit	40.3, rat, 4hr
Ethylene glycol monobutyl ether	111-76-2	560, rat	400, rabbit	450 ppm 4 h, rat

12 – ECOLOGICAL INFORMATION

Light aromatic naphtha solvent	64742-95-6
LC50 9.2 mg/L	Oncorhynchus mykiss

Medium aliphatic naphtha solvent	64742-88-7
LC50 800 mg/L. 96h, statique	Pimephales promelas
CE50 450 mg/L, 96h	Pseudokirchneriella subcapitata

Secondary ethoxylated alcohol	84133-50-6
LC50 3.4 – 4.9, 96h, statique	Pimephales promelas
LC50 1.6 – 3.1 mg/L, 48h, statique	Daphnia magna
IC50 >750 mg/L, 16h	Batetia

Isopropylic alcohol	67-63-0
LC50 11130 mg/L, 96 h, statique	Pimephales promelas
LC50 9640 mg/L, 96 h, dynamique	Pimephales promelas
LC50 1400 mg/L, 96 h	Lepomis macrochirus
CE50 1000 mg/L, 72 h	Desmodesmus subspicatus
CE50 1000 mg/L, 96 h	Desmodesmus subspicatus

Ethylene glycol monobutyl ether	111-76-2

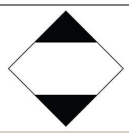
LC50 1474 mg/L, 96 h, statique	Oncorhynchus mykiss
CE50 1800 mg/L, 48 h, statique	Daphnia magna
CE50 977 mg/L, 72 h, statique	Pseudokirchniella subcapitata

PERSISTENCE AND DEGRADABILITY	Not available.
BIOACCUMULATIVE POTENTIAL	Not available.
SOIL MOBILITY	Not available.
OTHER ADVERSE EFFECTS	May cause harmful effects to aquatic life.
ADDITIONAL INFORMATION	Do not let material or fire-fighting water run-off enter sewers or waterways. Obstruct drains and ditches. Affected areas must be cleaned and restored to their original conditions or to the satisfaction of the authorities

13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD	Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.
CONTAMINATED PACKAGING	Empty containers should be recycled or disposed of through an approved waste management facility.

14 – TRANSPORT INFORMATION

TRANSPORT OF DANGEROUS GOODS (CANADA)				
UN NUMBER	PROPER SHIPPING NAME	CLASS	PACKING GROUP	PLACARD
1993	FLAMMABLE LIQUID N.O.S. (HYDROCARBONS)	3	III	
LIMITED QUANTITY: 5 KG or 5 L				
FLASH POINT:		30.0°C		

MARINE POLLUTANT	Potential marine pollutant.
SPECIAL PRECAUTIONS	Keep away from sources of ignition and heat.

15 – REGULATORY INFORMATION

CEPA	All components of this product are either listed or exempt from listing on the Domestic substances List (DSL).
TSCA	All components of this product are either listed or exempt from listing on the Toxic Substances Control Act (TSCA) Inventory.

16 – OTHER INFORMATION

VERSION	1.0
DATE	September 1st 2015
PREPARED BY	AUTO-CHEM INC
ABBREVIATIONS	ABBREVIATIONS
ACGIH	American Conference of Governmental Industrial Hygienists
AIHA	American Industrial Hygiene Association
CAS	Chemical Abstract Service
CEPA	Canadian Environmental Protection Act
CIRC	Centre International pour la Recherche sur le Cancer
CL / LC	Concentration létale /Lethal concentration
DL / LD	Dose létale / Lethal dose
CE / EC	Concentration efficace / Effective concentration
IARC	International Agency for Research on Cancer
LCPE	Loi Canadienne sur la Protection de l'Environnement
LES/NDSL	Liste extérieure des substances / Non domestic substances list
LIS/DSL	Liste intérieure des substances / Domestic substances list
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
SIMDUT	Système d'information sur les matières dangereuses utilisées au travail
STEL	Short-term Exposure Limit
STOT	Specific target organ toxicity
TCOC	Toxicité pour certains organs cibles
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
USEPA	United States Environmental Protection Agency
VECD	Valeur exposition courte durée
VEMP	Valeur exposition moyenne pondérée
WHMIS	Workplace Hazardous Materials Information System
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