


1 – IDENTIFICATION

IDENTIFIER	ENGINE SHAMPOO
PRODUCT CODE	3601, 3602, 3603
RECOMMENDED USE	Engine shampoo.
RESTRICTIONS ON USE	Do not mix with other products.
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	Skin corrosion, 1 Serious eye damage, 1 Specific target organ toxicity, single exposure; Respiratory tract irritation, 3	
LABEL ELEMENTS		
SIGNAL WORD	DANGER	
HAZARD STATEMENT	H314 H318 H335	Causes sever skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.
PRECAUTIONARY STATEMENTS – PREVENTION	P260 P264 P280 P271	Do not breathe dust, fume, gas, mist, vapours, spray. Wash hands thoroughly after handling. Wear protective gloves, protective clothing, eye/face protection. Use only outdoors or in a well-ventilated area.
PRECAUTIONARY STATEMENTS – RESPONSE	P301+P330+P331 P303+P361+P353 P363 P304+P340 P310 P321 P305+P351+P338 P312	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Specific treatment: Treat as chemical burns. IF IN EYES: Rinse cautiously wit water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER or doctor if you feel unwell.
PRECAUTIONARY STATEMENTS –	P405	Store locked up.

STORAGE	P403-P233	Store in a well-ventilated place. Keep container tightly closed.
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
2-butoxyethanol	111-76-2	5 – 10 *
Sodium metasilicate	6834-92-0	1 – 5 *
Ethoxylated alcohol C10-C16	68002-97-1	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
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INHALATION	IF INHALED: remove 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 as chemical burns.

5 – FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Chemical foam, water, carbon dioxide, according to fire conditions.
UNSUITABLE EXTINGUISHING MEDIA	Water jet directly on the product may cause formation of foam.
SPECIFIC HAZARDS	Carbon oxides, acrid smoke. .
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 RELEASE MEASURES

PROTECTIVE EQUIPMENT	Wear appropriate respiratory equipment (See Section 8). Avoid direct contact with product. Remove non-essential personnel.
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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	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. Keep cool. Store away from incompatible materials. Keep containers closed.
INCOMPATIBLE MATERIALS	Oxidizing agents, acids.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

CHEMICAL NAME	C.A.S.	SOURCE	VALUE
2-butoxyethanol	111-76-2	CSST ACGIH NIOSH-REL	TWA 20 ppm (97 mg/m ³) TWA 20 ppm TWA 5ppm (24 mg/m ³)
Sodium metasilicate	6834-92-0	UKEH40	TWA 2 mg/m ³ , 15 min.
Ethoxylated alcohol C10-C16	68002-97-1		No established limits.

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, red.
ODOUR	Sweet.

ODOUR TRESHOLD	Not available.
pH	13.27
MELTING / FREEZING POINT	Not available.
INITIAL BOILING POINT	100°C
FLASH POINT	Not applicable.
EVAPORATION RATE	Not available.
FLAMMABILITY	Not flammable.
LOWER FLAMMABLE/EXPLOVISE LIMIT	Not applicable.
UPPER FLAMMABLE/EXPLOSIVE LIMIT	Not applicable.
VAPOUR PRESSURE	Not available.
VAPOUR DENSITY	Not available.
RELATIVE DENSITY	1.026
SOLUBILITY (in water)	Soluble.
PARTITION COEFFICIENT (n-octanol/water)	Not available.
AUTO-IGNITION TEMPERATURE	Not available.
DECOMPOSITION TEMPERATURE	Not available.
VOC (w/w)	71.82 g/L (0.070Kg/Kg)
VISCOSITY (100 RPM, Spindle 1)	< 50 cPs

10 – STABILITY AND REACTIVITY

REACTIVITY	Stable under recommended usage.
CHEMICAL STABILITY	Stable under normal usage conditions.
HAZARDOUS REACTIONS	Polymerization will not occur.
CONDITIONS TO AVOID	Contact with incompatible materials.
INCOMPATIBLE MATERIALS	Oxidizing agents, acids.
HAZARDOUS DECOMPOSITION PRODUCTS	Carbon oxides.
ADDITIONAL INFORMATION	None.

11 – TOXICOLOGICAL INFORMATION

ACUTE EFFECTS	
INHALATION	May cause irritation of respiratory tract.
DERMAL	May cause chemical burns, redness, skin irritation.
OCULAR	May cause eye damages on direct contact. Vapours may cause eye irritation.
ORAL	May cause burns of the gastric tract.
CHRONIC EFFECTS	
INHALATION	No data.
DERMAL	No data.
OCULAR	Overexposure may cause irreversible damage to cornea.

ORAL	No data.		
ADDITIONAL INFORMATION			
CARCINOGENIC EFFECTS (IARC)	2-butoxyethanol	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	No data.		
AGGRAVATED CONDITIONS	No data.		
SYNERGISTIC SUBSTANCES	No data.		

CHEMICAL NAME	C.A.S.	LD50 ORAL mg/kg	LD50 DERMAL mg/kg	LC50 INHALATION
2-butoxyethanol	111-76-2	560, rat	400, lapin	450 ppm 4 h, rat
Sodium metasilicate	6834-92-0	1152 – 1349, rat	>5000, rat	>2.06, rat
Ethoxylated alcohol C10-C16	68002-97-1	>1400, rat	2000, rat	No data.

12 – ECOLOGICAL INFORMATION

2-butoxyethanol	111-76-2
LC50 1474 mg/L, 96 h, statique	Oncorhynchus mykiss
EC50 1800 mg/L, 48 h, statique	Daphnia magna
EC50 977 mg/L, 72 h, statique	Pseudokirchniella subcapitata

Sodium metasilicate	6834-92-0
LC50 210 mg/L, 96h	Brachydanio rerio
EC50 1700 mg/L, 48h	Daphnia magna

Ethoxylated alcohol C10-C16	68002-97-1
LC50 0.46 mg/L	Daphnia
LC50 1 mg/L, 96h	Pimephales promelas

PERSISTENCE AND DEGRADABILITY	Not available.
BIOACCUMULATIVE POTENTIAL	Not available.
SOIL MOBILITY	Not available.
OTHER ADVERSE EFFECTS	Not available.
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
1760	CORROSIVE LIQUID N.O.S. (Sodium metasilicate)	8	III	
LIMITED QUANTITY: 5 L				

MARINE POLLUTANT	No.
SPECIAL PRECAUTIONS	Keep away from incompatible materials.

15 – REGULATORY INFORMATION

CANADA	
CEPA	All components of this product are either listed or exempt from listing on the Domestic substances List (DSL).
USA	
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	11 May 2017
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/NDL	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 organes 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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