

**ENGINE SHAMPOO, 475 g**

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

**SECTION 1. IDENTIFICATION**

Product name : ENGINE SHAMPOO, 475 g  
Product code : 893.013055  
Other means of identification : No data available

**Manufacturer or supplier's details**

Company name of supplier : Würth Canada Limited  
Address : 345 Hanlon Creek Blvd  
GUELPH, ON N1C 0A1  
Telephone : +1 (905) 564 6225  
Telefax : +1 (905) 564 3671  
Emergency telephone : Emergencies involving a spill, fire, explosion or exposure:  
CHEMTREC (24/7): 1-800-424-9300  
Transport related emergencies:  
CANUTEC (24/7): 1-613-996-6666 or \* 666 (cell)  
  
Urgences impliquant un déversement, incendie, explosion ou exposition:  
CHEMTREC (24/7): 1-800-424-9300  
Urgences liées au transport:  
CANUTEC (24/7): 1-613-996-6666 ou \* 666 (cellulaire)  
  
E-mail address : prodsafe@wurth.ca

**Recommended use of the chemical and restrictions on use**

Recommended use : Cleaning agent  
Detergent  
Degreasing agent

Restrictions on use : Not applicable

---

**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with the Hazardous Products Regulations**


Flammable aerosols : Category 1  
Gases under pressure : Liquefied gas  
Skin irritation : Category 2  
Serious eye damage : Category 1

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

**Carcinogenicity** : Category 1B  
**Specific target organ toxicity - single exposure** : Category 3  
**Specific target organ toxicity - repeated exposure** : Category 1 (Central nervous system)  
**Specific target organ toxicity - repeated exposure (Oral)** : Category 2 (Kidney)

**GHS label elements**

**Hazard pictograms** : 

**Signal Word** : Danger

**Hazard Statements** : H222 Extremely flammable aerosol.  
 H280 Contains gas under pressure; may explode if heated.  
 H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H336 May cause drowsiness or dizziness.  
 H350 May cause cancer.  
 H372 Causes damage to organs (Central nervous system) through prolonged or repeated exposure.  
 H373 May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

**Precautionary Statements** : **Prevention:**  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P211 Do not spray on an open flame or other ignition source.  
 P251 Do not pierce or burn, even after use.  
 P260 Do not breathe spray.  
 P264 Wash skin thoroughly after handling.  
 P270 Do not eat, drink or smoke when using this product.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves, protective clothing, eye protection and face protection.

**Response:**  
 P302 + P352 IF ON SKIN: Wash with plenty of water.  
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell.  
 P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

**ENGINE SHAMPOO, 475 g**

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
 Date of first issue: 01/26/2018

**CENTER.**

P308 + P313 IF exposed or concerned: Get medical attention.

P332 + P313 If skin irritation occurs: Get medical attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

**Storage:**

P405 Store locked up.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C (122 °F).

**Disposal:**

P501 Dispose of contents and container to an approved waste disposal plant.

**Other hazards**

None known.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Components**

Chemical name	Common Name/Synonym	CAS-No.	Concentration (% w/w)
Stoddard solvent	C8 to C14 branched, linear, and cyclic paraffins and aromatics (<0.1% benzene)	8052-41-3	>= 10 - < 30 *
Liquified petroleum gas (LPG)	Petroleum gases, liquefied	68476-85-7	>= 10 - < 30 *
Solvent naphtha (petroleum), light arom.	No data available	64742-95-6	>= 10 - < 30 *
1,2,4-Trimethylbenzene	Benzene, 1,2,4-trimethyl-	95-63-6	>= 10 - < 30 *
Alcohols, C9-11, ethoxylated	Ethoxylated C9-11 alcohols	68439-46-3	>= 1 - < 5 *
Ethylene glycol	1,2-Ethanediol	107-21-1	>= 1 - < 5 *
1,3,5-Trimethylbenzene	Mesitylene	108-67-8	>= 1 - < 5 *
Nonane	No data available	111-84-2	>= 1 - < 5 *
Potassium hydroxide	Caustic potash	1310-58-3	>= 0.5 - < 1 *
Cumene	Benzene, (1-methylethyl)-	98-82-8	>= 0.1 - < 1 *
Coconut oil diethanolamide	Amides, coco, N,N-bis(hydroxyethyl)	68603-42-9	>= 0.1 - < 1 *
Naphthalene	No data available	91-20-3	>= 0.1 - < 1 *

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

	ble		
--	-----	--	--

\* Actual concentration or concentration range is withheld as a trade secret

**SECTION 4. FIRST AID MEASURES**

- |   |   |  |
|---|---|--|
| General advice  | : | In the case of accident or if you feel unwell, seek medical advice immediately.<br>When symptoms persist or in all cases of doubt seek medical advice.   |
| If inhaled  | : | If inhaled, remove to fresh air.<br>Get medical attention.   |
| In case of skin contact                                     | : | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.<br>Get medical attention.<br>Wash clothing before reuse.<br>Thoroughly clean shoes before reuse. |
| In case of eye contact                                      | : | In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.<br>If easy to do, remove contact lens, if worn.<br>Get medical attention immediately.   |
| If swallowed  | : | If swallowed, DO NOT induce vomiting.<br>Get medical attention.<br>Rinse mouth thoroughly with water.  |
| Most important symptoms and effects, both acute and delayed | : | Causes skin irritation.<br>Causes serious eye damage.<br>May cause drowsiness or dizziness.<br>May cause cancer.<br>Causes damage to organs through prolonged or repeated exposure.  |
| Protection of first-aiders                                  | : | First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).  |
| Notes to physician  | : | Treat symptomatically and supportively.  |

**SECTION 5. FIRE-FIGHTING MEASURES**

- |                                |   |  |
|--------------------------------|---|--|
| Suitable extinguishing media   | : | Water spray<br>Alcohol-resistant foam<br>Carbon dioxide (CO <sub>2</sub> )<br>Dry chemical |
| Unsuitable extinguishing media | : | None known.  |
| Specific hazards during fire   | : | Flash back possible over considerable distance.  |

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

- fighting : Vapors may form explosive mixtures with air. Exposure to combustion products may be a hazard to health. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.
- Hazardous combustion products : Carbon oxides
- Specific extinguishing methods : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
- Environmental precautions : Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g., by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/mists with a water spray jet. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

**SECTION 7. HANDLING AND STORAGE**

- Technical measures : See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust ventilation.  
If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

Advice on safe handling : Do not get on skin or clothing.  
Do not breathe spray.  
Do not swallow.  
Do not get in eyes.  
Wash skin thoroughly after handling.  
Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment  
Keep container tightly closed.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Take precautionary measures against static discharges.  
Do not eat, drink or smoke when using this product.  
Take care to prevent spills, waste and minimize release to the environment.  
Do not spray on an open flame or other ignition source.

Conditions for safe storage : Store locked up.  
Keep tightly closed.  
Keep in a cool, well-ventilated place.  
Store in accordance with the particular national regulations.  
Do not pierce or burn, even after use.  
Keep cool. Protect from sunlight.

Materials to avoid : Do not store with the following product types:  
Self-reactive substances and mixtures  
Organic peroxides  
Oxidizing agents  
Flammable solids  
Pyrophoric liquids  
Pyrophoric solids  
Self-heating substances and mixtures  
Substances and mixtures which in contact with water emit flammable gases  
Explosives  
Gases

Recommended storage temperature : > 10 - 40 °C

---

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**
**Ingredients with workplace control parameters**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis

**ENGINE SHAMPOO, 475 g**Version  
4.0Revision Date:  
05/29/2023SDS Number:  
10788772-00008Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

Stoddard solvent	8052-41-3	TWA	100 ppm 572 mg/m <sup>3</sup>	CA AB OEL
		TWA	290 mg/m <sup>3</sup>	CA BC OEL
		STEL	580 mg/m <sup>3</sup>	CA BC OEL
		TWAEV	100 ppm 525 mg/m <sup>3</sup>	CA QC OEL
		TWA	525 mg/m <sup>3</sup>	CA ON OEL
		TWA	100 ppm	ACGIH
Liquified petroleum gas (LPG)	68476-85-7	TWA	1,000 ppm	CA AB OEL
		STEL	1,500 ppm	CA AB OEL
		TWAEV	1,000 ppm 1,800 mg/m <sup>3</sup>	CA QC OEL
Solvent naphtha (petroleum), light arom.	64742-95-6	TWA	200 mg/m <sup>3</sup> (total hydrocarbon vapor)	CA AB OEL
1,2,4-Trimethylbenzene	95-63-6	TWA	25 ppm 123 mg/m <sup>3</sup>	CA AB OEL
		TWAEV	25 ppm	CA QC OEL
		TWA	25 ppm	CA BC OEL
		TWA	10 ppm	ACGIH
		TWA	10 ppm	ACGIH
Ethylene glycol	107-21-1	(c)	100 mg/m <sup>3</sup>	CA AB OEL
		C (Vapor)	50 ppm	CA BC OEL
		C (Vapour and mist)	50 ppm 127 mg/m <sup>3</sup>	CA QC OEL
		TWA (Total, aerosol only)	10 mg/m <sup>3</sup>	CA BC OEL
		STEL (Total, aerosol only)	20 mg/m <sup>3</sup>	CA BC OEL
		C (Total, aerosol only)	100 mg/m <sup>3</sup>	CA BC OEL
		TWA (Vapor)	25 ppm	ACGIH
		STEL (Va- por)	50 ppm	ACGIH
		STEL (Inha- lable fraction, Aerosol only)	10 mg/m <sup>3</sup>	ACGIH
1,3,5-Trimethylbenzene	108-67-8	TWA	25 ppm 123 mg/m <sup>3</sup>	CA AB OEL
		TWAEV	25 ppm	CA QC OEL
		TWA	25 ppm	CA BC OEL
		TWA	10 ppm	ACGIH
Nonane	111-84-2	TWA	200 ppm 1,050 mg/m <sup>3</sup>	CA AB OEL
		TWA	200 ppm	CA BC OEL
		TWAEV	200 ppm 1,050 mg/m <sup>3</sup>	CA QC OEL
		TWA	200 ppm	ACGIH
Potassium hydroxide	1310-58-3	(c)	2 mg/m <sup>3</sup>	CA AB OEL
		C	2 mg/m <sup>3</sup>	CA BC OEL
		C	2 mg/m <sup>3</sup>	CA QC OEL
		C	2 mg/m <sup>3</sup>	ACGIH
Cumene	98-82-8	TWA	50 ppm	CA AB OEL

**ENGINE SHAMPOO, 475 g**

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
 Date of first issue: 01/26/2018

			246 mg/m <sup>3</sup>	
		TWA	25 ppm	CA BC OEL
		STEL	75 ppm	CA BC OEL
		TWAEV	50 ppm 246 mg/m <sup>3</sup>	CA QC OEL
		TWA	5 ppm	ACGIH
Naphthalene	91-20-3	TWA	10 ppm 52 mg/m <sup>3</sup>	CA AB OEL
		STEL	15 ppm 79 mg/m <sup>3</sup>	CA AB OEL
		TWA	10 ppm	CA BC OEL
		TWAEV	10 ppm	CA QC OEL
		TWA	10 ppm	ACGIH

**Engineering measures** : Minimize workplace exposure concentrations.  
 If sufficient ventilation is unavailable, use with local exhaust ventilation.  
 If advised by assessment of the local exposure potential, use only in an area equipped with explosion-proof exhaust ventilation.

**Personal protective equipment**

**Respiratory protection** : If adequate local exhaust ventilation is not available or exposure assessment demonstrates exposures outside the recommended guidelines, use respiratory protection.

**Filter type** : Self-contained breathing apparatus

**Hand protection**

**Material** : Neoprene

**Material** : Nitrile rubber

**Remarks** : Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday. Breakthrough time is not determined for the product. Change gloves often!

**Eye protection** : Wear the following personal protective equipment:  
 Chemical resistant goggles must be worn.  
 If splashes are likely to occur, wear:  
 Face-shield

**Skin and body protection** : Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.  
 Wear the following personal protective equipment:  
 If assessment demonstrates that there is a risk of explosive atmospheres or flash fires, use flame retardant antistatic



**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---



Hygiene measures

protective clothing.  
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

: If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.  
When using do not eat, drink or smoke.  
Wash contaminated clothing before re-use.

---

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	:	Aerosol containing a liquefied gas
Propellant	:	Liquefied petroleum gas (LPG)
Color	:	yellow, clear
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	9.9 Concentration: 100 g/l
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	Not applicable
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Extremely flammable aerosol.
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	Not applicable
Relative vapor density	:	> 1
Relative density	:	No data available

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

Density	:	0.88 g/cm <sup>3</sup> (15 °C)
Solubility(ies)	:	
Water solubility	:	partly soluble
Partition coefficient: n-octanol/water	:	Not applicable
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity	:	
Viscosity, kinematic	:	< 14 mm <sup>2</sup> /s ( 40 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.
Particle size	:	Not applicable

---

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	Extremely flammable aerosol. Vapors may form explosive mixture with air. If the temperature rises there is danger of the vessels bursting due to the high vapor pressure. Can react with strong oxidizing agents.
Conditions to avoid	:	Heat, flames and sparks.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

---

**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Inhalation  
Skin contact  
Ingestion  
Eye contact

**Acute toxicity**

|| Not classified based on available information.

**Product:**

|| Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

Acute inhalation toxicity	:	Method: Calculation method Acute toxicity estimate: > 20 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Calculation method
---------------------------	---	--

**Components:**
**Stoddard solvent:**

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 5.5 mg/l Exposure time: 4 h Test atmosphere: vapor Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50: > 5,000 mg/kg

**Liquified petroleum gas (LPG):**

Acute inhalation toxicity	:	LC50 (Mouse): 520400 ppm Exposure time: 2 h Test atmosphere: gas Remarks: Based on data from similar materials
---------------------------	---	---

**Solvent naphtha (petroleum), light arom.:**

Acute oral toxicity	:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 5.6 mg/l Exposure time: 4 h Test atmosphere: vapor Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

**1,2,4-Trimethylbenzene:**

Acute oral toxicity	:	LD50 (Rat): 3,280 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): > 10.2 mg/l Exposure time: 4 h Test atmosphere: vapor Remarks: Based on data from similar materials
Acute dermal toxicity	:	LD50 (Rat): > 3,160 mg/kg

**Alcohols, C9-11, ethoxylated:**

Acute oral toxicity	:	LD50 (Rat): > 300 - 2,000 mg/kg
---------------------	---	---------------------------------

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
 Method: OECD Test Guideline 402  
 Assessment: The substance or mixture has no acute dermal toxicity  
 Remarks: Based on data from similar materials

**Ethylene glycol:**

Acute oral toxicity : Acute toxicity estimate: 1,330 mg/kg  
 Method: Expert judgment

Acute inhalation toxicity : LC50 (Rat): > 2.5 mg/l  
 Exposure time: 6 h  
 Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Mouse): > 3,500 mg/kg

**1,3,5-Trimethylbenzene:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
 Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 10.2 mg/l  
 Exposure time: 4 h  
 Test atmosphere: vapor  
 Assessment: The substance or mixture has no acute inhalation toxicity  
 Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg  
 Assessment: The substance or mixture has no acute dermal toxicity  
 Remarks: Based on data from similar materials

**Nonane:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
 Remarks: Based on data from similar materials

Acute inhalation toxicity : LC50 (Rat): > 20 mg/l  
 Exposure time: 4 h  
 Test atmosphere: vapor

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
 Assessment: The substance or mixture has no acute dermal toxicity  
 Remarks: Based on data from similar materials

**Potassium hydroxide:**

Acute oral toxicity : LD50 (Rat): 333 mg/kg

Acute inhalation toxicity : Assessment: Corrosive to the respiratory tract.

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

**Cumene:**

Acute oral toxicity : LD50 (Rat): 2,700 mg/kg  
Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

**Coconut oil diethanolamide:**

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**Naphthalene:**

Acute oral toxicity : LD50 (Mouse): 553 mg/kg  
Method: OECD Test Guideline 401  
Acute inhalation toxicity : LC50 (Rat): > 0.4 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: OECD Test Guideline 403  
Acute dermal toxicity : LD50 (Rat): > 2,500 mg/kg  
Assessment: The substance or mixture has no acute dermal toxicity

**Skin corrosion/irritation**

|| Causes skin irritation.

**Components:****Stoddard solvent:**

Assessment : Repeated exposure may cause skin dryness or cracking.

**Solvent naphtha (petroleum), light arom.:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Skin irritation

**1,2,4-Trimethylbenzene:**

Species : Rabbit  
Result : Skin irritation  
Remarks : Based on data from similar materials

**Alcohols, C9-11, ethoxylated:**

Species : Rabbit  
Result : No skin irritation  
Remarks : Based on data from similar materials

**Ethylene glycol:**

Species : Rabbit

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

Result : No skin irritation

**1,3,5-Trimethylbenzene:**

Species : Rabbit  
Result : Skin irritation

**Nonane:**

Species : Rabbit  
Result : Skin irritation  
Remarks : Based on data from similar materials

**Potassium hydroxide:**

Species : Rabbit  
Result : Corrosive after 3 minutes or less of exposure

**Cumene:**

Species : Rabbit  
Result : No skin irritation

**Coconut oil diethanolamide:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : Skin irritation  
Remarks : Based on data from similar materials

**Naphthalene:**

Species : Rabbit  
Method : OECD Test Guideline 404  
Result : No skin irritation

**Serious eye damage/eye irritation**

|| Causes serious eye damage.

**Components:****Stoddard solvent:**

Species : Rabbit  
Result : No eye irritation

**Solvent naphtha (petroleum), light arom.:**

Species : Rabbit  
Result : No eye irritation

**1,2,4-Trimethylbenzene:**

|| Species : Rabbit  
|| Result : No eye irritation  
|| Remarks : Based on data from similar materials

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

**Alcohols, C9-11, ethoxylated:**

Species : Rabbit  
Result : Irreversible effects on the eye  
Remarks : Based on data from similar materials

**Ethylene glycol:**

Species : Rabbit  
Result : No eye irritation

**1,3,5-Trimethylbenzene:**

Species : Rabbit  
Result : No eye irritation  
Remarks : Based on data from similar materials

**Nonane:**

Species : Rabbit  
Result : No eye irritation  
Remarks : Based on data from similar materials

**Potassium hydroxide:**

Species : Rabbit  
Result : Irreversible effects on the eye

**Cumene:**

Species : Rabbit  
Result : No eye irritation

**Coconut oil diethanolamide:**

Species : Rabbit  
Result : Irreversible effects on the eye  
Method : OECD Test Guideline 405  
Remarks : Based on data from similar materials

**Naphthalene:**

Species : Guinea pig  
Result : No eye irritation  
Method : OECD Test Guideline 405

**Respiratory or skin sensitization****Skin sensitization**

|| Not classified based on available information.

**Respiratory sensitization**

|| Not classified based on available information.

**Components:****Stoddard solvent:**

Routes of exposure : Skin contact

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

Species : Guinea pig  
Result : negative

**Solvent naphtha (petroleum), light arom.:**

Test Type : Buehler Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative

**1,2,4-Trimethylbenzene:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Method : OECD Test Guideline 406  
Result : negative

**Alcohols, C9-11, ethoxylated:**

Test Type : Buehler Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative  
Remarks : Based on data from similar materials

**Ethylene glycol:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative

**1,3,5-Trimethylbenzene:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative  
Remarks : Based on data from similar materials

**Nonane:**

Test Type : Maximization Test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative  
Remarks : Based on data from similar materials

**Potassium hydroxide:**

Test Type : Intracutaneous test  
Routes of exposure : Skin contact  
Species : Guinea pig  
Result : negative



**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

**Cumene:**

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Result	:	negative

**Coconut oil diethanolamide:**

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative
Remarks	:	Based on data from similar materials

**Naphthalene:**

Test Type	:	Maximization Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	negative

**Germ cell mutagenicity**

|| Not classified based on available information.

**Components:**
**Stoddard solvent:**

Genotoxicity in vitro	:	Test Type: In vitro mammalian cell gene mutation test Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Rodent dominant lethal test (germ cell) (in vivo) Species: Mouse Application Route: Intraperitoneal injection Result: negative Remarks: Based on data from similar materials

**Liquified petroleum gas (LPG):**

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Rat Application Route: inhalation (gas) Method: OECD Test Guideline 474 Result: negative

**Solvent naphtha (petroleum), light arom.:**

## ENGINE SHAMPOO, 475 g

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

Genotoxicity in vivo : Test Type: Mutagenicity (in vivo mammalian bone-marrow  
cytogenetic test, chromosomal analysis)  
Species: Rat  
Application Route: Intraperitoneal injection  
Result: negative

**1,2,4-Trimethylbenzene:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative  
Remarks: Based on data from similar materials

Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

Test Type: Mutagenicity (in vitro mammalian cytogenetic test)  
Result: negative  
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Result: negative  
Remarks: Based on data from similar materials

**Alcohols, C9-11, ethoxylated:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials

**Ethylene glycol:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Method: OECD Test Guideline 471  
Result: negative

**1,3,5-Trimethylbenzene:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo  
cytogenetic assay)  
Species: Mouse  
Application Route: Intraperitoneal injection  
Result: negative

**Nonane:**

**ENGINE SHAMPOO, 475 g**

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

Test Type: In vitro mammalian cell gene mutation test  
Method: OECD Test Guideline 476  
Result: negative  
Remarks: Based on data from similar materials

**Potassium hydroxide:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

**Cumene:**

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro  
Method: OECD Test Guideline 473  
Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test  
Species: Mouse  
Application Route: Intraperitoneal injection  
Method: OECD Test Guideline 474  
Result: negative

**Coconut oil diethanolamide:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

**Naphthalene:**

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative

Test Type: Chromosome aberration test in vitro  
Result: positive

Genotoxicity in vivo : Test Type: Unscheduled DNA synthesis (UDS) test with  
mammalian liver cells in vivo  
Species: Rat  
Application Route: Ingestion  
Result: negative

**Carcinogenicity**

**||** May cause cancer.

**Components:****Liquified petroleum gas (LPG):**

Species : Mouse  
Application Route : inhalation (gas)  
Exposure time : 103 weeks  
Result : negative  
Remarks : Based on data from similar materials

**ENGINE SHAMPOO, 475 g**

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

**Solvent naphtha (petroleum), light arom.:**

Species : Mouse  
Application Route : Skin contact  
Exposure time : 102 weeks  
Result : negative

**Ethylene glycol:**

Species : Mouse  
Application Route : Ingestion  
Exposure time : 2 Years  
Result : negative

**Cumene:**

Species : Rat  
Application Route : inhalation (vapor)  
Exposure time : 105 weeks  
Method : OECD Test Guideline 451  
Result : positive

Species : Mouse  
Application Route : inhalation (vapor)  
Exposure time : 105 weeks  
Method : OECD Test Guideline 451  
Result : positive

Carcinogenicity - Assessment : Sufficient evidence of carcinogenicity in animal experiments

**Coconut oil diethanolamide:**

Species : Rat  
Application Route : Skin contact  
Exposure time : 2 Years  
Result : negative

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

**Naphthalene:**

Species : Rat  
Application Route : inhalation (vapor)  
Exposure time : 105 weeks  
Result : positive

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

**Reproductive toxicity**

|| Not classified based on available information.

**Components:****Solvent naphtha (petroleum), light arom.:**

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative

**1,2,4-Trimethylbenzene:**

Effects on fertility : Test Type: Three-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rat  
Application Route: inhalation (vapor)  
Method: OECD Test Guideline 414  
Result: negative

**Alcohols, C9-11, ethoxylated:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: Skin contact  
Result: negative

Effects on fetal development : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: Skin contact  
Result: negative

**1,3,5-Trimethylbenzene:**

Effects on fertility : Test Type: Three-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative

**Nonane:**

Effects on fertility : Test Type: Two-generation reproduction toxicity study  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative  
Remarks: Based on data from similar materials

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rat  
Application Route: inhalation (vapor)  
Result: negative

**Cumene:**

Effects on fertility : Species: Rat, male  
Application Route: inhalation (vapor)  
Result: negative

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rat  
Application Route: inhalation (vapor)  
Method: OECD Test Guideline 414  
Result: negative

**Naphthalene:**

Effects on fetal development : Test Type: Embryo-fetal development  
Species: Rabbit  
Application Route: Ingestion  
Method: OECD Test Guideline 414  
Result: negative

**STOT-single exposure**

|| May cause drowsiness or dizziness.

**Components:****Stoddard solvent:**

Assessment : May cause drowsiness or dizziness.

**Liquified petroleum gas (LPG):**

Assessment : May cause drowsiness or dizziness.

**Solvent naphtha (petroleum), light arom.:**

Assessment : May cause drowsiness or dizziness.

**1,2,4-Trimethylbenzene:**

Assessment : May cause respiratory irritation.

**1,3,5-Trimethylbenzene:**

Assessment : May cause respiratory irritation.

**Nonane:**

Assessment : May cause drowsiness or dizziness.

**Cumene:**

Assessment : May cause respiratory irritation.

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

**STOT-repeated exposure**

Causes damage to organs (Central nervous system) through prolonged or repeated exposure.  
May cause damage to organs (Kidney) through prolonged or repeated exposure if swallowed.

**Components:****Stoddard solvent:**

Target Organs : Central nervous system  
Assessment : Causes damage to organs through prolonged or repeated exposure.

**Ethylene glycol:**

Routes of exposure : Ingestion  
Target Organs : Kidney  
Assessment : Shown to produce significant health effects in animals at concentrations of >10 to 100 mg/kg bw.

**Naphthalene:**

Routes of exposure : inhalation (vapor)  
Assessment : No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.

**Repeated dose toxicity****Components:****Stoddard solvent:**

Species : Rat  
NOAEL : 2.34 mg/l  
LOAEL : 4.67 mg/l  
Application Route : inhalation (vapor)  
Exposure time : 6 Months

**Liquified petroleum gas (LPG):**

Species : Rat  
NOAEL : 10000 ppm  
Application Route : inhalation (gas)  
Exposure time : 13 Weeks

**Solvent naphtha (petroleum), light arom.:**

Species : Rat  
NOAEL : 1.4 mg/l  
Application Route : inhalation (vapor)  
Exposure time : 107 Weeks

**1,2,4-Trimethylbenzene:**

Species : Rat  
NOAEL : 600 mg/kg  
Application Route : Ingestion  
Exposure time : 90 Days

**ENGINE SHAMPOO, 475 g**

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

Method : OECD Test Guideline 408  
Remarks : Based on data from similar materials

Species : Rat  
NOAEL : 1230 mg/m<sup>3</sup>  
Application Route : inhalation (vapor)  
Exposure time : 90 Days

**Alcohols, C9-11, ethoxylated:**

Species : Rat  
NOAEL : >= 500 mg/kg  
Application Route : Ingestion  
Exposure time : 90 Days  
Remarks : Based on data from similar materials

**Ethylene glycol:**

Species : Rat  
NOAEL : 150 mg/kg  
Application Route : Ingestion  
Exposure time : 2 y

Species : Dog  
NOAEL : 2,200 - 4,400 mg/kg  
Application Route : Skin contact  
Exposure time : 4 Weeks  
Method : OECD Test Guideline 410

**1,3,5-Trimethylbenzene:**

Species : Rat  
NOAEL : 600 mg/kg  
Application Route : Ingestion  
Exposure time : 90 Days  
Method : OECD Test Guideline 408

**Nonane:**

Species : Rat  
NOAEL : 100 mg/kg  
Application Route : Ingestion  
Exposure time : 90 Days  
Method : OECD Test Guideline 408

Species : Rat  
NOAEL : 8.4 mg/l  
Application Route : inhalation (vapor)  
Exposure time : 13 Weeks

**Cumene:**

Species : Rat  
NOAEL : 125 ppm  
LOAEL : 250 ppm  
Application Route : inhalation (vapor)



## ENGINE SHAMPOO, 475 g

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

Exposure time : 90 Days

**Coconut oil diethanolamide:**

Species : Rat  
NOAEL : > 750 mg/kg  
Application Route : Ingestion  
Exposure time : 28 Days  
Remarks : Based on data from similar materials

**Naphthalene:**

Species : Mouse  
NOAEL : 133 mg/kg  
Application Route : Ingestion  
Exposure time : 90 Days  
Method : OECD Test Guideline 408

Species : Rat  
NOAEL : 0.011 mg/l  
Application Route : inhalation (vapor)  
Exposure time : 13 Weeks  
Method : OECD Test Guideline 413

Species : Rat  
NOAEL : 300 mg/kg  
Application Route : Skin contact  
Exposure time : 13 Weeks  
Method : OECD Test Guideline 411

**Aspiration toxicity**

|| Not classified based on available information.

**Components:****Stoddard solvent:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Solvent naphtha (petroleum), light arom.:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**1,2,4-Trimethylbenzene:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**1,3,5-Trimethylbenzene:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

**Nonane:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Cumene:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

**Experience with human exposure****Components:****Stoddard solvent:**

Inhalation : Target Organs: Central nervous system  
Symptoms: Dizziness, Headache, Neurological disorders

---

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Components:****Stoddard solvent:**

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.4 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 1.2 mg/l  
Exposure time: 72 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (Daphnia magna (Water flea)): 0.097 mg/l  
Exposure time: 21 d  
Method: OECD Test Guideline 211  
Remarks: Based on data from similar materials

**Solvent naphtha (petroleum), light arom.:**

Toxicity to fish : LL50 (Pimephales promelas (fathead minnow)): 8.2 mg/l  
Exposure time: 96 h  
Test substance: Water Accommodated Fraction

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 4.5 mg/l  
Exposure time: 48 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): 880 mg/l  
Exposure time: 72 h  
Test substance: Water Accommodated Fraction  
Method: OECD Test Guideline 201

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

NOELR (Pseudokirchneriella subcapitata (green algae)): 0.1 mg/l  
 Exposure time: 72 h  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR (Daphnia magna (Water flea)): 2.6 mg/l  
 Exposure time: 21 d  
 Test substance: Water Accommodated Fraction  
 Method: OECD Test Guideline 211

**1,2,4-Trimethylbenzene:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 7.72 mg/l  
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 3.6 mg/l  
 Exposure time: 48 h  
 Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): 2.356 mg/l  
 Exposure time: 96 h

**Ecotoxicology Assessment**

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

**Alcohols, C9-11, ethoxylated:**

Toxicity to fish : LC50 : > 1 - 10 mg/l  
 Exposure time: 96 h  
 Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l  
 Exposure time: 48 h  
 Remarks: Based on data from similar materials

**Ethylene glycol:**

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 72,860 mg/l  
 Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
 Exposure time: 48 h  
 Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 6,500 - 13,000 mg/l  
 Exposure time: 96 h

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 15,380 mg/l  
 Exposure time: 7 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Ceriodaphnia dubia (water flea)): 8,590 mg/l  
 Exposure time: 7 d

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

**1,3,5-Trimethylbenzene:**

- Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 3.48 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 6 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EbC50 (Desmodesmus subspicatus (green algae)): 25 mg/l  
Exposure time: 48 h
- EC10 (Desmodesmus subspicatus (green algae)): 8.1 mg/l  
Exposure time: 48 h
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.4 mg/l  
Exposure time: 21 d

**Nonane:**

- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.2 mg/l  
Exposure time: 48 h

**Cumene:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.8 mg/l  
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 2.14 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202
- Toxicity to algae/aquatic plants : ErC50 (Desmodesmus subspicatus (green algae)): 2.01 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- EC10 (Desmodesmus subspicatus (green algae)): 1.35 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.35 mg/l  
Exposure time: 21 d

**Coconut oil diethanolamide:**

- Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): 6.7 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): 2.15 mg/l  
Exposure time: 48 h
- Toxicity to algae/aquatic plants : EC50 (Scenedesmus subspicatus): 2.2 mg/l  
Exposure time: 72 h

**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

NOEC (*Scenedesmus subspicatus*): 0.32 mg/l  
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (*Oncorhynchus mykiss* (rainbow trout)): 0.32 mg/l  
Exposure time: 28 d  
Method: OECD Test Guideline 204  
Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia magna* (Water flea)): 0.07 mg/l  
Exposure time: 21 d  
Method: OECD Test Guideline 211  
Remarks: Based on data from similar materials

**Naphthalene:**

Toxicity to fish : LC50 (*Pimephales promelas* (fathead minnow)): 6.08 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 2.16 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (*Skeletonema costatum* (marine diatom)): 0.4 mg/l  
Exposure time: 72 h

Toxicity to fish (Chronic toxicity) : NOEC (*Oncorhynchus kisutch* (coho salmon)): 0.37 mg/l  
Exposure time: 40 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (*Daphnia pulex* (Water flea)): 0.59 mg/l  
Exposure time: 125 d

Toxicity to microorganisms : IC50 (*Nitrosomonas* sp.): 29 mg/l  
Exposure time: 24 h

**Persistence and degradability**
**Components:**
**Stoddard solvent:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 75 %  
Exposure time: 28 d

**Liquified petroleum gas (LPG):**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 70 %

**Solvent naphtha (petroleum), light arom.:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 77 %  
Exposure time: 28 d

## ENGINE SHAMPOO, 475 g

Version 4.0      Revision Date: 05/29/2023      SDS Number: 10788772-00008      Date of last issue: 11/15/2022  
Date of first issue: 01/26/2018

---

Method: OECD Test Guideline 301F

**1,2,4-Trimethylbenzene:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 60 %  
Exposure time: 28 d

**Alcohols, C9-11, ethoxylated:**

Biodegradability : Result: rapidly degradable

**Ethylene glycol:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 90 - 100 %  
Exposure time: 10 d  
Method: OECD Test Guideline 301A

**1,3,5-Trimethylbenzene:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 0 %  
Exposure time: 8 d

**Nonane:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 100 %  
Exposure time: 25 d

**Cumene:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 70 %  
Exposure time: 20 d

**Coconut oil diethanolamide:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: 84 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301D

**Naphthalene:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 2 %  
Exposure time: 4 Weeks  
Method: OECD Test Guideline 302

**Bioaccumulative potential****Components:****Stoddard solvent:**

Partition coefficient: n- : log Pow: > 4



**ENGINE SHAMPOO, 475 g**

Version      Revision Date:      SDS Number:      Date of last issue: 11/15/2022  
4.0          05/29/2023          10788772-00008      Date of first issue: 01/26/2018

---

**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

- Waste from residues : Dispose of in accordance with local regulations.  
Do not dispose of waste into sewer.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
Empty containers retain residue and can be dangerous.  
Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.  
If not otherwise specified: Dispose of as unused product.  
Please ensure aerosol cans are sprayed completely empty (including propellant)
- 

**SECTION 14. TRANSPORT INFORMATION****International Regulations****UNRTDG**

- UN number : UN 1950  
Proper shipping name : AEROSOLS  
Class : 2.1  
Packing group : Not assigned by regulation  
Labels : 2.1

**IATA-DGR**

- UN/ID No. : UN 1950  
Proper shipping name : Aerosols, flammable  
Class : 2.1  
Packing group : Not assigned by regulation  
Labels : Flammable Gas  
Packing instruction (cargo aircraft) : 203  
Packing instruction (passenger aircraft) : 203

**IMDG-Code**

- UN number : UN 1950  
Proper shipping name : AEROSOLS  
(Stoddard solvent, Nonane)  
Class : 2.1  
Packing group : Not assigned by regulation  
Labels : 2.1  
EmS Code : F-D, S-U  
Marine pollutant : yes

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation****TDG**



**ENGINE SHAMPOO, 475 g**

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

UN number	:	UN 1950
Proper shipping name	:	AEROSOLS
Class	:	2.1
Packing group	:	Not assigned by regulation
Labels	:	2.1
ERG Code	:	126
Marine pollutant	:	yes(Stoddard solvent, Nonane)

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

---

**SECTION 15. REGULATORY INFORMATION**

<b>Volatile organic compounds (VOC) content</b>	CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999 - Guidelines for VOC in Consumer Products VOC content: 66.2 % / 583 g/l
---	---

**The ingredients of this product are reported in the following inventories:**

DSL	:	All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).
-----	---	--

---

**SECTION 16. OTHER INFORMATION**
**Full text of other abbreviations**

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL
CA ON OEL	:	Ontario Table of Occupational Exposure Limits made under the Occupational Health and Safety Act.
CA QC OEL	:	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for air-borne contaminants
ACGIH / TWA	:	8-hour, time-weighted average
ACGIH / STEL	:	Short-term exposure limit
ACGIH / C	:	Ceiling limit
CA AB OEL / TWA	:	8-hour Occupational exposure limit
CA AB OEL / STEL	:	15-minute occupational exposure limit
CA AB OEL / (c)	:	ceiling occupational exposure limit
CA BC OEL / TWA	:	8-hour time weighted average
CA BC OEL / STEL	:	short-term exposure limit
CA BC OEL / C	:	ceiling limit
CA ON OEL / TWA	:	Time-Weighted Average Limit (TWA)
CA QC OEL / TWA EV	:	Time-weighted average exposure value
CA QC OEL / C	:	Ceiling

## ENGINE SHAMPOO, 475 g

Version	Revision Date:	SDS Number:	Date of last issue: 11/15/2022
4.0	05/29/2023	10788772-00008	Date of first issue: 01/26/2018

---

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Sources of key data used to compile the Material Safety Data Sheet : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, <http://echa.europa.eu/>

Revision Date : 05/29/2023  
Date format : mm/dd/yyyy

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8