

155-056

Engine Shampoo/ Engine Degreaser

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Date of issue: 12/19/2016

Revision date: 12/19/2016

Version: 1.0

SECTION 1: Identification

1.1 Product identifier

Product name : Engine Shampoo
Product number : 645/646/649

1.2 Recommended use and restrictions on use

Recommended use : Degreaser

1.3 Supplier

Manufacturer

Kleen-Flo Tumbler Industries Ltd.
75 Advance Blvd.
L6T 4N1 Brampton - Canada
T (905) 793-4311

1.4 Emergency telephone number

Emergency number : CANUTEC 613-996-6666

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification (GHS-CA)	
Flammable liquids Category 3	H226
Skin corrosion/irritation Category 2	H315
Serious eye damage/eye irritation Category 1	H318
Skin sensitization Category 1	H317
Carcinogenicity Category 2	H351
Reproductive toxicity Category 2	H361
Specific target organ toxicity (single exposure) Category 3	H336
Aspiration hazard Category 1	H304

2.2 GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA)



GHS02



GHS05



GHS07



GHS08

Signal word (GHS-CA)

: Danger

Hazard statements (GHS-CA)

- : H226 - Flammable liquid and vapour
- H304 - May be fatal if swallowed and enters airways
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H318 - Causes serious eye damage
- H336 - May cause drowsiness or dizziness
- H351 - Suspected of causing cancer
- H361 - Suspected of damaging fertility or the unborn child
- : 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
- P233 - Keep container tightly closed
- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof electrical/ventilating/lighting equipment
- P242 - Use only non-sparking tools
- P243 - Take action to prevent static discharges
- P261 - Avoid breathing dust/fume/gas/mist/vapours/spray
- P264 - Wash hands, forearms and face thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P280 - Wear protective gloves/protective clothing/eye protection/face protection
- P308+P313 - IF exposed or concerned: Get medical advice/attention
- P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
- P331 - Do NOT induce vomiting
- P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
- P362+P364 - Take off contaminated clothing and wash it before reuse
- P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

Engine Shampoo/ Engine Degreaser

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P312 - Call a POISON CENTER or doctor if you feel unwell
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-CA)

Not applicable.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Stoddard solvent	(CAS No) 8052-41-3	65-85
Fuel oil No. 2	(CAS No) 68476-30-2	7-13
Alcohols, C9-11, ethoxylated	(CAS No) 68439-46-3	5-10
Dipentene	(CAS No) 138-86-3	0.1-1

* Hazardous constituents of Stoddard Solvent:

*Nonane	(CAS No) 111-84-2	<5
*Benzene, 1,2,4-trimethyl-	(CAS No) 95-63-6	<5
*Xylenes (o-, m-, p- isomers)	(CAS No) 1330-20-7	0.9
*Naphthalene	(CAS No) 91-20-3	0.5
*Ethylbenzene	(CAS No) 100-41-4	0.5

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash clothing before re-using. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: 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 CENTER or doctor/physician.
First-aid measures after ingestion	: IF SWALLOWED: immediately call a POISON CENTER or doctor/physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia.

4.3. Immediate medical attention and special treatment, if necessary

Other medical advice or treatment	: Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
-----------------------------------	--

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
------------------------------	---

5.2. Unsuitable extinguishing media

Unsuitable extinguishing media	: None known.
--------------------------------	---------------

5.3. Specific hazards arising from the hazardous product

Fire hazard	: Flammable liquid and vapour. Products of combustion may include, and are not limited to: oxides of carbon. Aldehydes. Hydrocarbons. Sulfur oxides.
Explosion hazard	: May form flammable/explosive vapour-air mixture.

5.4. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).
--------------------------------	--

Engine Shampoo/ Engine Degreaser

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

- : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition.

6.2. Methods and materials for containment and cleaning up

For containment

- : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up

- : Sweep or shovel spills into appropriate container for disposal.

6.3. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

- : Use only outdoors or in a well-ventilated area. Avoid breathing dust, fume, gas, mist, spray, vapours. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Avoid contact with skin and eyes.

Hygiene measures

- : Wash contaminated clothing before reuse. Always wash hands after handling the product.

Additional hazards when processed

- : Handle empty containers with care because residual vapours are flammable.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

- : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions

- : Store locked up. Keep container tightly closed. Store in a well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Stoddard solvent (8052-41-3)

USA - ACGIH	ACGIH TWA (ppm)	100 ppm
-------------	-----------------	---------

Fuel oil No. 2 (68476-30-2)

USA - ACGIH	ACGIH TWA (mg/m ³)	100 mg/m ³ (inhalable fraction and vapor)
-------------	--------------------------------	--

Nonane (111-84-2)

USA - ACGIH	ACGIH TWA (ppm)	200 ppm
-------------	-----------------	---------

Xylenes (o-, m-, p- isomers) (1330-20-7)

USA - ACGIH	ACGIH TWA (ppm)	100 ppm
-------------	-----------------	---------

USA - ACGIH	ACGIH STEL (ppm)	150 ppm
-------------	------------------	---------

Naphthalene (91-20-3)

USA - ACGIH	ACGIH TWA (ppm)	10 ppm
-------------	-----------------	--------

Ethylbenzene (100-41-4)

USA - ACGIH	ACGIH TWA (ppm)	20 ppm
-------------	-----------------	--------

8.2. Appropriate engineering controls

Appropriate engineering controls

- : Ensure good ventilation of the work station.

Environmental exposure controls

- : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Wear suitable gloves resistant to chemical penetration

Eye protection:

Wear eye/face protection

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Other Information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

: Liquid

Appearance

: Clear

Engine Shampoo/ Engine Degreaser

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Colour	: Red
Odour	: Pine
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Relative evaporation rate (ether=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 150 - 370 °C
Flash point	: 47 °C Tag cc (ASTM D56)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable liquid and vapour
Vapour pressure	: No data available
Vapour pressure at 50 °C	: No data available
Relative density	: 0.8 @ 22 °C
Solubility	: No data available
Partition coefficient n-octanol/water	: No data available
Viscosity, kinematic	: No data available
Explosive limits	: No data available

2.2 Other information

No additional information available

SECTION 10: Stability and reactivity

10.1 Reactivity

Reactivity	: No dangerous reactions known under normal conditions of use.
Chemical stability	: Stable under normal conditions. May form flammable/explosive vapour-air mixture.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Heat. Incompatible materials. Sources of ignition. Direct sunlight.
Incompatible materials	: Strong oxidizers.
Hazardous decomposition products	: May include, and are not limited to: oxides of carbon. Aldehydes. Sulfur oxides. May release flammable gases.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	: Not classified.
Acute toxicity (dermal)	: Not classified.
Acute toxicity (inhalation)	: Not classified.

Engine Shampoo / Engine Degreaser	
LD50 oral rat	> 2000 mg/kg (Calculated acute toxicity estimate)
LD50 dermal rabbit	> 2000 mg/kg (Calculated acute toxicity estimate)
LC50 inhalation rat	> 20 mg/l/4h (Calculated acute toxicity estimate)
Fuel oil No. 2 (68476-30-2)	
LD50 oral rat	12 g/kg
LD50 dermal rabbit	4720 µl/kg
LC50 inhalation rat	4.6 mg/l/4h
Alcohols, C9-11, ethoxylated (68439-46-3)	
LD50 oral rat	1400 mg/kg
Nonane (111-84-2)	
LC50 inhalation rat	3200 ppm/4h
Benzene, 1,2,4-trimethyl- (95-63-6)	
LD50 oral rat	3280 mg/kg
LD50 dermal rabbit	> 3160 mg/kg
LC50 inhalation rat	18 g/m³ (Exposure time: 4 h)
Xylenes (o-, m-, p- Isomers) (1330-20-7)	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	> 4350 mg/kg

Engine Shampoo/ Engine Degreaser

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

Xylenes (o-, m-, p- isomers) (1330-20-7)	
LC50 inhalation rat	29.08 mg/l/4h
Naphthalene (91-20-3)	
LD50 oral rat	1110 mg/kg
LD50 dermal rabbit	1120 mg/kg
LC50 inhalation rat	> 340 mg/m³ (Exposure time: 1 h)
Ethylbenzene (100-41-4)	
LD50 oral rat	3500 mg/kg
LD50 dermal rabbit	15400 mg/kg
LC50 inhalation rat	17.4 mg/l/4h
Dipentene (138-86-3)	
LD50 oral rat	5300 mg/kg
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Suspected of damaging fertility or the unborn child.
STOT-single exposure	: May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified.
Aspiration hazard	: May be fatal if swallowed and enters airways.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.
Symptoms/injuries after inhalation	: May cause drowsiness or dizziness.
Symptoms/injuries after skin contact	: Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
Symptoms/injuries after eye contact	: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.
Symptoms/injuries after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia.

SECTION 12: Ecological Information

12.1 Toxicity	
Ecology - general	: May cause long-term adverse effects in the aquatic environment.
Fuel oil No. 2 (68476-30-2)	
LC50 fish 1	35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
Benzene, 1,2,4-trimethyl- (95-63-6)	
LC50 fish 1	7.19 - 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Xylenes (o-, m-, p- isomers) (1330-20-7)	
LC50 fish 1	13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	2.661 - 4.093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	3.82 mg/l (Exposure time: 48 h - Species: water flea)
EC50 Daphnia 2	0.6 mg/l (Exposure time: 48 h - Species: Gammarus lacustris)
Naphthalene (91-20-3)	
LC50 fish 1	5.74 - 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 1	2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2	1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])
Ethylbenzene (100-41-4)	
LC50 fish 1	11.0 - 18.0 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
LC50 fish 2	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 Daphnia 1	1.8 - 2.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
12.2 Persistence and degradability	
Engine Shampoo /Engine Degreaser	
Persistence and degradability	Not established.

Engine Shampoo/ Engine Degreaser

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)

12.3. Bioaccumulative potential

Engine Shampoo/ Engine Degreaser

Bioaccumulative potential	Not established.
---------------------------	------------------

Benzene, 1,2,4-trimethyl- (95-63-6)

Partition coefficient n-octanol/water	3.63
---------------------------------------	------

Xylenes (o-, m-, p- isomers) (1330-20-7)

BCF fish 1	0.6 - 15
------------	----------

Partition coefficient n-octanol/water	2.77 - 3.15
---------------------------------------	-------------

Naphthalene (91-20-3)

BCF fish 1	30 - 430
------------	----------

Partition coefficient n-octanol/water	3.6
---------------------------------------	-----

Ethylbenzene (100-41-4)

BCF fish 1	15
------------	----

Partition coefficient n-octanol/water	3.2
---------------------------------------	-----

12.4. Mobility in soil

Benzene, 1,2,4-trimethyl- (95-63-6)

Partition coefficient n-octanol/water	3.63
---------------------------------------	------

Xylenes (o-, m-, p- isomers) (1330-20-7)

Partition coefficient n-octanol/water	2.77 - 3.15
---------------------------------------	-------------

Naphthalene (91-20-3)

Partition coefficient n-octanol/water	3.6
---------------------------------------	-----

Ethylbenzene (100-41-4)

Partition coefficient n-octanol/water	3.2
---------------------------------------	-----

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Additional information : Handle empty containers with care because residual vapours are flammable.

SECTION 14: Transport information

14.1. Basic shipping description

In accordance with TDG

Transportation of Dangerous Goods

Not regulated for transport. Exempted under section 1.33 of the TDG.

14.2. Transport information/DOT

No additional information available

14.3. Air and sea transport

No additional information available

SECTION 15: Regulatory information

15.1. National regulations

All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories.

15.2. International regulations

No additional information available

SECTION 16: Other information

Date of issue : 12/19/2016
Revision date : 12/19/2016
Other information : None.
Prepared by : Kleen-Flo Tumbler Industries Ltd.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.