

Kleen Flo Engine Degreaser

Safety Data Sheet

according to the Hazardous Products Regulation (February 11, 2015)
Issue date: 2023-11-08 Revision date: 2024-07-12 Version: 2.0

SECTION 1: Identification

1.1. Product identifier

Product form : Mixture
Product name : Kleen Flo Engine Degreaser
Product code : 824

1.2. Recommended use and restrictions on use

Recommended uses and restrictions : Engine degreaser

1.3. Supplier

Manufacturer
Kleen-Flo Tumbler Industries Ltd.
75 Advance Boulevard
L6T 4N1 Brampton - CANADA
T 905-793-4311

1.4. Emergency telephone number

Emergency number : 905-793-4311(Monday to Friday 8:30am to 4:30pm EST) (English Language Only)
450-265-6444(Monday to Friday 8:30am to 4:30pm EST) (French Language Only)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Flam. Aerosol 1	H222	Extremely flammable aerosol.
Press. Gas (Liq.)	H280	Contains gas under pressure; may explode if heated.
Acute Tox. 4 (Inhalation)	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2A	H319	Causes serious eye irritation.
Carc. 2	H351	Suspected of causing cancer.
STOT SE 1	H370	Causes damage to organs.
STOT SE 3	H335	May cause respiratory irritation.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.
Simple Asphy		May displace oxygen and cause rapid suffocation

2.2. GHS Label elements, including precautionary statements

GHS-CA labelling

Hazard pictograms (GHS-CA) : 

Signal word (GHS CA) : Danger

Hazard statements (GHS-CA) : H222 - Extremely flammable aerosol.
H280 - Contains gas under pressure; may explode if heated.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H332 - Harmful if inhaled.

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Precautionary statements (GHS-CA)	H335 - May cause respiratory irritation. H351 - Suspected of causing cancer. H370 - Causes damage to organs. May displace oxygen and cause rapid suffocation
	: 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 dust/fume/gas/mist/vapours/spray. P264 - Wash hands, forearms and face 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/face protection. P308+P311 - IF exposed or concerned: Call a POISON CENTER or doctor. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. P331 - Do NOT induce vomiting. P302+P352 - IF ON SKIN: Wash with plenty of water. P362+P364 - Take off contaminated clothing and wash it before reuse. P332+P313 - If skin irritation occurs: Get medical advice/attention. 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. P337+P313 - If eye irritation persists: Get medical advice/attention. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. 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

Other hazards which do not result in classification : Contact with the liquefied gas may cause frostbite.

2.4. Unknown acute toxicity (GHS CA)

85% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%
Fuels, diesel, no. 2	Fuel oil, no. 2-D / Diesel fuel no. 2 / Gasoil - unspecified / Diesel No. 2 / Fuels, diesel, No. 2 / Diesel fuel No. 2 / Diesel engine exhaust / Fuels, diesel, no. 2 (A distillate oil having a minimum viscosity of 32.6 SUS at 37.7°C (100°F) to a maximum of 40.1 SUS at 37.7°C (100°F).) / Diesel fuel oil no. 2-D	CAS-No.: 68476-34-6	40 - 80
Fuels, diesel, C9-18-alkane branched and linear	-	CAS-No.: 1159170-26-9	40 - 80
Kerosine, petroleum	-	CAS-No.: 8008-20-6	<= 40

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Name	Chemical name / Synonyms	Product identifier	%
Petroleum distillates, hydrotreated light	Petroleum distillates, hydrotreated light (A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C9-16 and boiling in the range of approximately 150-290°C.) / Odorless light petroleum hydrocarbons / Hydrocarbons, C11-14, n-alkanes, isoalkanes, cyclics	CAS-No.: 64742-47-8	5 – 30
Alcohols, C9-11, ethoxylated	-	CAS-No.: 68439-46-3	1 - 5
Carbon dioxide	Dry ice / CARBON DIOXIDE	CAS-No.: 124-38-9	1 - 5
Alkanes, C10-20-branched and linear	-	CAS-No.: 928771-01-1	1 - 5
Solvent naphtha, petroleum, heavy aromatic	-	CAS-No.: 64742-94-5	1 – 5

Comments : *Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	: IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation 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. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.
First-aid measures general	: IF exposed and concerned: Call a POISON CENTER/doctor.

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

Symptoms/effects after inhalation	: Harmful if inhaled. May cause irritation to the respiratory tract. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause frostbite on contact with the liquefied gas.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause frostbite on contact with the liquefied gas.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia.
Chronic symptoms	: Causes damage to organs. Suspected of causing cancer.

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).
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

Suitable extinguishing media	: Carbon dioxide. Dry chemical. Foam. Water spray.
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5.2. Unsuitable extinguishing media

Unsuitable extinguishing media : Do not use water jet.

5.3. Specific hazards arising from the hazardous product

Fire hazard : Extremely flammable aerosol. Products of combustion may include, and are not limited to: oxides of carbon. Vapours are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapours. Irritating vapours.

Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Ruptured cylinders may rocket.

5.4. Special protective equipment and precautions for fire-fighters

Firefighting instructions : DO NOT fight fire when fire reaches explosives. Evacuate area. Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray.

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

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. Eliminate every possible source of ignition. Use only non-sparking tools. Use special care to avoid static electric charges.

6.2. Methods and materials for containment and cleaning up

For containment : Stop leak if safe to do so. 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. Provide ventilation.

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 : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area.

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

Additional hazards when processed : Hazardous waste due to potential risk of explosion.

7.2. Conditions for safe storage, including any incompatibilities

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

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Do not expose to temperatures exceeding 50 °C/ 122 °F. Keep in fireproof place. Store away from direct sunlight or other heat sources. Protect containers from physical damage. Store in a well-ventilated place. Store locked up.

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Fuels, diesel, no. 2 (68476-34-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	100 mg/m³ (inhalable fraction and vapor (Diesel fuel))
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route
Kerosine, petroleum (8008-20-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Kerosene, as total hydrocarbon vapor
ACGIH OEL TWA	200 mg/m³ (application restricted to conditions in which there are negligible aerosol exposures-total Hydrocarbon vapor (Kerosene/Jet fuels))
Remark (ACGIH)	TLV® Basis: Skin & URT irr; CNS impair. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans, Skin - potential significant contribution to overall exposure by the cutaneous route
Regulatory reference	ACGIH 2024
Carbon dioxide (124-38-9)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Carbon dioxide
ACGIH OEL TWA	5000 ppm
ACGIH OEL STEL	30000 ppm
Remark (ACGIH)	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2022
USA - OSHA - Occupational Exposure Limits	
Local name	Carbon dioxide
OSHA PEL TWA	9000 mg/m³
OSHA PEL TWA	5000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable gloves. Consult glove manufacturer's product information on material suitability and material thickness.

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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. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

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	: Aerosol.
Colour	: Colourless
Odour	: Fuel oil
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	: No data available
Flash point	: > 93 °C
Auto-ignition temperature	: > 200 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Extremely flammable aerosol.
Vapour pressure	: No data available
Relative vapour density at 20°C	: No data available
Relative density	: No data available
Solubility	: Partially soluble.
Partition coefficient n-octanol/water	: No data available
Viscosity, kinematic	: < 20.5 mm²/s (40°C)
Explosive limits	: No data available

Fuels, diesel, no. 2 (68476-34-6)	
Boiling point	141 – 462 °C (at 1013 hPa)
Flash point	> 56 °C
Vapour pressure	4 hPa (at 40 °C)

Kerosine, petroleum (8008-20-6)	
Boiling point	146 – 299 °C (at 1013.25 hPa)
Flash point	21 °C (closed cup)
Auto-ignition temperature	210 °C

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Kerosine, petroleum (8008-20-6)	
Vapour pressure	1 – 3.7 kPa Temp.: 37,8 °C

Petroleum distillates, hydrotreated light (64742-47-8)	
Boiling point	146 – 299 °C Atm. press.: 101,325 kPa
Flash point	21 °C (closed cup)
Auto-ignition temperature	> 200 °C (at 1013 hPa)
Vapour pressure	0.01 – 0.3 hPa (at 20 °C)

Alkanes, C10-20-branched and linear (928771-01-1)	
Boiling point	400 – 559 (at 1011.5 hPa)
Vapour pressure	87.1 Pa (at 25 °C)

Alcohols, C9-11, ethoxylated (68439-46-3)	
Boiling point	260 °C
Flash point	125 °C
Vapour pressure	117 Pa Temp.: 20 °C

Carbon dioxide (124-38-9)	
Boiling point	56 °C (at 5.11 atm (triple point)
Vapour pressure	5728.9 kPa (at 20 °C)

Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
Boiling point	174 – 193 °C
Flash point	< -30 °C (closed cup)
Auto-ignition temperature	550 °C
Vapour pressure	4100 Pa Temp.: 25 °C

9.2. Other information

Gas group : Press. Gas (Liq.)

SECTION 10: Stability and reactivity

Reactivity	: No dangerous reactions known under normal conditions of use.
Chemical stability	: Stable under normal conditions. Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Do not puncture. Do not burn. Extreme risk of explosion by shock, friction, fire or other sources of ignition. Contains gas under pressure; may explode if heated.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Heat. Sparks. Open flame. Direct sunlight. Overheating. Incompatible materials.
Incompatible materials	: Strong oxidizing agents.
Hazardous decomposition products	: May include, and are not limited to: oxides of carbon.
Hardening time:	: No additional information available

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.
Acute toxicity (dermal) : Not classified.
Acute toxicity (inhalation) : Harmful if inhaled.

ATE CA (Gases)	4500 ppmv/4h
ATE CA (vapours)	11 mg/l/4h
ATE CA (dust,mist)	1.5 mg/l/4h
Unknown acute toxicity (GHS CA)	85% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

Fuels, diesel, no. 2 (68476-34-6)

LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LC50 inhalation rat	5.4 mg/l/4h
ATE CA (vapours)	5.4 mg/l/4h
ATE CA (dust,mist)	5.4 mg/l/4h

Kerosine, petroleum (8008-20-6)

LD50 oral rat	> 5000 mg/kg (Source: CHEMVIEW)
LD50 dermal rabbit	> 2000 mg/kg (Source: CHEMVIEW)
LC50 inhalation rat	> 5.28 mg/l/4h

Petroleum distillates, hydrotreated light (64742-47-8)

LD50 oral rat	> 5000 mg/kg (Source: IUCLID)
LD50 dermal rabbit	> 2000 mg/kg (Source: NLM_CIP)
LC50 inhalation rat	> 5.2 mg/l/4h

Alkanes, C10-20-branched and linear (928771-01-1)

LD50 dermal rat	> 2000 mg/kg (Source: ECHA_API)
LC50 inhalation rat	1 – 5 mg/l air Animal: rat, Guideline: OECD Guideline 436 (Acute Inhalation Toxicity: Acute Toxic Class Method)

Alcohols, C9-11, ethoxylated (68439-46-3)

LD50 oral rat	1400 mg/kg (Source: NZ_CCID)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 inhalation rat	> 1.6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
ATE CA (oral)	1400 mg/kg bodyweight

Solvent naphtha, petroleum, heavy aromatic (64742-94-5)

LD50 oral rat	> 5000 mg/kg (Source: IUCLID)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: other:EPA Fed Reg Vol 50, No. 188 1985 and as amended in Fed Reg Vol 52, No. 97, 1987
LD50 dermal rabbit	> 2000 mg/kg (Source: ECHA_API)
LC50 inhalation rat	> 590 mg/m³ (Exposure time: 4 h Source: NLM_CIP)

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Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: Not classified.
Germ cell mutagenicity	: Not classified.
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified.

Fuels, diesel, no. 2 (68476-34-6)

NOAEL (animal/male, F0/P)	≥ 3000 mg/kg bodyweight Animal: rat, Animal sex: male
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Kerosine, petroleum (8008-20-6)

NOAEL (animal/male, F0/P)	≥ 3000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 415 [One-Generation Reproduction Toxicity Study (before 9 October 2017)]
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Petroleum distillates, hydrotreated light (64742-47-8)

NOAEL (animal/male, F0/P)	≥ 3000 mg/kg bodyweight Animal: rat, Animal sex: male
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Solvent naphtha, petroleum, heavy aromatic (64742-94-5)

NOAEL (animal/male, F0/P)	35 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:OPPTS 870.3650 Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test
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NOAEL (animal/female, F0/P)	125 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:OPPTS 870.3650 Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test
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STOT-single exposure	: Causes damage to organs. May cause respiratory irritation.
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Fuels, diesel, C9-18-alkane branched and linear (1159170-26-9)

STOT-single exposure	Causes damage to organs. May cause respiratory irritation.
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STOT-repeated exposure	: Not classified.
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Kerosine, petroleum (8008-20-6)

NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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NOAEL (dermal, rat/rabbit, 90 days)	≥ 495 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
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Petroleum distillates, hydrotreated light (64742-47-8)

NOAEL (oral, rat, 90 days)	750 mg/kg bodyweight Animal: rat, Animal sex: female
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NOAEL (dermal, rat/rabbit, 90 days)	≥ 495 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
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NOAEC (inhalation, rat, vapour, 90 days)	≥ 0.024 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
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Alkanes, C10-20-branched and linear (928771-01-1)

NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
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Alcohols, C9-11, ethoxylated (68439-46-3)

NOAEL (oral, rat, 90 days)	≥ 500 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
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Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
LOAEC (inhalation, rat, vapour, 90 days)	4.71 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	2000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)

Aspiration hazard : May be fatal if swallowed and enters airways.

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Vaporizer	Aerosol
Viscosity, kinematic	< 20.5 mm²/s (40°C)

Fuels, diesel, no. 2 (68476-34-6)	
Animal studies and expert judgment for classification	False

Fuels, diesel, C9-18-alkane branched and linear (1159170-26-9)	
Animal studies and expert judgment for classification	False

Kerosine, petroleum (8008-20-6)	
Animal studies and expert judgment for classification	False

Petroleum distillates, hydrotreated light (64742-47-8)	
Animal studies and expert judgment for classification	False

Alkanes, C10-20-branched and linear (928771-01-1)	
Animal studies and expert judgment for classification	False

Alcohols, C9-11, ethoxylated (68439-46-3)	
Animal studies and expert judgment for classification	False

Carbon dioxide (124-38-9)	
Vaporizer	Aerosol
Animal studies and expert judgment for classification	False

Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
Animal studies and expert judgment for classification	False

Symptoms/effects after inhalation	: Harmful if inhaled. May cause irritation to the respiratory tract. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing. Symptoms of oxygen deficiency include respiratory difficulty, headache, dizziness, nausea, unconsciousness or death.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause frostbite on contact with the liquefied gas.
Symptoms/effects after eye contact	: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause frostbite on contact with the liquefied gas.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. May result in aspiration into the lungs, causing chemical pneumonia.
Chronic symptoms	: Causes damage to organs. Suspected of causing cancer.

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Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified.
Hazardous to the aquatic environment, long-term (chronic) : Not classified.

Fuels, diesel, no. 2 (68476-34-6)	
LC50 - Fish [1]	35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: IUCLID)
Petroleum distillates, hydrotreated light (64742-47-8)	
LC50 - Fish [1]	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through] Source: IUCLID)
LC50 - Fish [2]	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)
Alkanes, C10-20-branched and linear (928771-01-1)	
NOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
LOEC (chronic)	3.2 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Alcohols, C9-11, ethoxylated (68439-46-3)	
LC50 - Fish [1]	5 – 7 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	2.5 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	1.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
LC50 - Fish [1]	19 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static] Source: IUCLID)
LC50 - Fish [2]	2.34 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss Source: IUCLID)
EC50 - Crustacea [1]	0.95 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 - Crustacea [2]	0.76 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	12.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	18.9 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	11.7 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	18.4 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

12.2. Persistence and degradability

Kleen Flo Engine Degreaser	
Persistence and degradability	Not established.

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12.3. Bioaccumulative potential

Kleen Flo Engine Degreaser	
Bioaccumulative potential	Not established.
Petroleum distillates, hydrotreated light (64742-47-8)	
BCF - Fish [1]	61 – 159
Alkanes, C10-20-branched and linear (928771-01-1)	
Partition coefficient n-octanol/water	> 6.5 (at 30 °C (at pH 7)
Carbon dioxide (124-38-9)	
BCF - Fish [1]	(no bioaccumulation)
Solvent naphtha, petroleum, heavy aromatic (64742-94-5)	
BCF - Fish [1]	61 – 159
Partition coefficient n-octanol/water	2.8 – 6.5 (at 23 °C (at pH 6.2)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Ozone	: Not classified.
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	: Flammable vapours may accumulate in the container.

SECTION 14: Transport information

In accordance with TDG

14.1. UN number

UN-No. (TDG)	: UN1950
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14.2. UN proper shipping name

Proper Shipping Name (TDG)	: AEROSOLS
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14.3. Transport hazard class(es)

TDG

Transport hazard class(es) (TDG)	: 2.1
Hazard labels (TDG)	: 2.1
	:



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14.4. Packing group

Packing group (TDG) : Not applicable

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

TDG

UN-No. (TDG) : UN1950

TDG Special Provisions : 80 - Despite section 1.17 of Part 1 (Coming into Force, Repeal, Interpretation, General Provisions and Special Cases), a person must not offer for transport or transport these dangerous goods unless they are in a means of containment that is in compliance with the requirements for transporting gases in Part 5 (Means of Containment), 107 - (1) These Regulations, except for Parts 1 and 2, do not apply to the offering for transport, handling or transport of UN1950, AEROSOLS, and UN2037, GAS CARTRIDGES, that contain dangerous goods included in Class 2.1 or Class 2.2 and that are transported on a road vehicle, a railway vehicle or a vessel on a domestic voyage, if the aerosols or gas cartridges have a capacity less than or equal to 50 mL.
(2) Subsection (1) does not apply to self-defence spray.

Explosive Limit and Limited Quantity Index : 1 L

Excepted quantities (TDG) : E0

Passenger Carrying Road Vehicle or Passenger : 75 L

Carrying Railway Vehicle Index

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

Not applicable

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

Issue date : 11-08-2023

Revision date : 07-12-2024

Indication of changes:

SDS update . GHS classification.

Other information : None.

Kleen Flo Engine Degreaser

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

Prepared by	Kleen-Flo Tumbler ind. Ltd.
Guidelines for SDS Use:	The product described in this SDS is a consumer product. It is safe for use by consumers as described on the product label under normal foreseeable conditions. This SDS is designed to provide additional valuable safety and handling information.

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