

Flo-Perm Diesel Exhaust Fluid

SAFETY DATA SHEET

SECTION 1: Identification

1.1 Product identifier

Product name Flo-Perm Diesel Exhaust Fluid
 Part #: 99002
 Substance name Mixture

1.4 Supplier's details

Name Vulsay Industries Ltd.
 Address 35 Regan Road
 Brampton, Ontario L7A 1B2
 Canada

Telephone 905 846 2200
 Fax 905 846 2249

1.5 Emergency phone number(s) 24 hours EMERGENCY Phone # - 1-800-468-1760

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards which do not result in classification

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Substance name: Mixture

Components

Component	Concentration
Urea (CAS no.: 57-13-6)	32.5 % (Weight)
Water (CAS no.: 7732-18-5)	67.5 % (Weight)

SECTION 4: First-aid measures

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4.1 Description of necessary first-aid measures

General advice	General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
In case of skin contact	Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.
In case of eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness develops or persists.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2 Most important symptoms/effects, acute and delayed

Not expected to present a significant hazard under anticipated conditions of normal use.
Inhalation: Prolonged exposure to liquid may cause a mild irritation.
Skin Contact: May cause mild skin irritation.
Eye Contact: Prolonged exposure to liquid may cause a mild irritation.
Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: No data available

4.3 Indication of immediate medical attention and special treatment needed, if necessary

If exposed or concerned, get medical advice and attention.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Use extinguishing media appropriate for surrounding fire.
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2 Specific hazards arising from the chemical

Fire Hazard: Not considered flammable but may burn at high temperatures.
Explosion Hazard: Product is not explosive.
Reactivity: Hazardous reactions will not occur under normal conditions.

5.3 Special protective actions for fire-fighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Oxides of Carbon, Nitrogen. Ammonia.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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General Measures: Avoid breathing (vapor, mist, spray). Avoid prolonged contact with eyes, skin and clothing.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Ventilate area.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Contact competent authorities after a spill

6.3 Methods and materials for containment and cleaning up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container.

Reference to other sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2 Conditions for safe storage, including any incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool, and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high or low temperatures, incompatible materials.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Alkalis.

Specific end use(s)

Diesel Exhaust NOx Reducing Agent.

SECTION 8: Exposure controls/personal protection

8.2 Appropriate engineering controls

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

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Safety glasses.

Skin protection

Wear suitable protective clothing.

Body protection

Wear chemically resistant protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental exposure controls

Prevent entry to sewers, on the ground, and public waters.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Clear colourless liquid
Odor	Slight Ammonia
Odor threshold	No data available.
pH	9.8 - 10.0
Melting point/freezing point	-12 deg C
Initial boiling point and boiling range	104 deg C
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability limits	No data available.
Upper/lower explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.087 - 1.093 @20 deg C
Solubility(ies)	100% soluble in water
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.
Explosive properties	No data available.
Oxidizing properties	No data available.

Other safety information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Hazardous reactions will not occur under normal conditions.

10.2 Chemical stability

Stable under recommended handling and storage conditions (see section 7).

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10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

Extremely high or low temperatures. Incompatible materials.

10.5 Incompatible materials

Strong acids. Strong bases. Strong oxidizers. Alkalis.

10.6 Hazardous decomposition products

Nitrogen oxides. Irritating fumes. Ammonia. Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Not classified

Urea (57-13-6)

LD50 oral rat 8,471.00 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Literature study; 14300 mg/kg bodyweight; Rat; Experimental value)

LD50 dermal rat > 3,200.00 mg/kg (Rat; Literature study)

LD50 dermal rabbit > 21,000.00 mg/kg (Rabbit; Literature study)

ATE US (oral) 8,471.00 mg/kg bodyweight

Skin corrosion/irritation

pH 9.8 - 10.0

Not classified

Serious eye damage/irritation

Not classified

Respiratory or skin sensitization

Not classified

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

Summary of evaluation of the CMR properties

Not classified

STOT-single exposure

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Not classified

STOT-repeated exposure

Not classified

Aspiration hazard

Not classified

Additional information

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

Toxicity

Urea (57-13-6)

LC50 Fish 1

16200 - 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)

EC50 Daphnia 1

3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence and degradability

Urea (57-13-6)

Persistence and degradability Inherently biodegradable. Hydrolysis in water. Highly mobile in soil.

ThOD 0.27 g O₂/g substance

Bioaccumulative potential

Urea (57-13-6)

BCF fish 1 1.00 (72 h; Brachydanio rerio; Fresh water)

BCF other aquatic organisms 1 11,700.00 (Chlorella sp.)

Log Pow < -1.73 (Experimental value; EU Method A.8: Partition Coefficient)

Bioaccumulative potential Bioaccumulation: not applicable.

Mobility in soil

No data available.

Other adverse effects

Avoid release to the environment.

SECTION 13: Disposal considerations

Disposal of the product

Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: Transport information

Canadian TDG: Not regulated

In accordance with DOT

Not a dangerous good in sense of transport regulations

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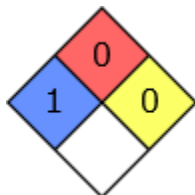
Other information : Not regulated by DOT.
 ADR
 UN-No. (ADR) : Not regulated by ADR
 Transport by sea
 UN-No. (IMDG) : Not regulated by IMDG
 Air transport
 UN-No. (IATA) : Not regulated by IATA

14.1	UN Number	None
14.2	UN Proper Shipping Name	None
14.3	Transport hazard class(es)	None
14.4	Packing group	None
14.5	Environmental hazards	None
14.6	Special precautions for user	None
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	None

SECTION 15: Regulatory information

Canadian Domestic Substances List (DSL)
 All ingredients are listed on the DSL/NDSL.

NFPA Rating



SECTION 16: Other information

SDS Prepared By: Quality Assurance Department

Phone #: 905 846 2200

Preparation date: March 6, 2017

Revision #: First Issue

Disclaimer

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