

1 Identification of substance

· **Product details**

· **Trade name:** **PROLINE ENGINE FLUSH**

· **Article number:** 2037

· **Application of the substance / the preparation** Cleaning material/ Detergent

· **Manufacturer/Supplier:**

LIQUI MOLY GmbH

Jerg-Wieland-Strasse 4

89081 Ulm-Lehr

Germany

Tel.: +49/(0)731/ 1420-0

Fax: +49/(0)731/ 1420-88

· **Information department:** see: chapter 16 (contact)

· **Emergency information:**

see manufacturer/supplier

see manufacturer/supplier or call INFOTRAC 1-800-535-5053

2 Composition/Data on components

· **Chemical characterization**

· **Description:** Mixture: consisting of the following components.

· **Dangerous components:**

	Naphtha (petroleum), hydrodesulfurized heavy	50-100%
	Mineral oil mist	10-25%
68610-84-4	Benzenesulfonic acid, propenated, calcium salt, overbased	≤ 2.5%
90194-27-7	Benzenesulfonic acid, C10-60-alkyl derivs., calcium salts	≤ 2.5%
	Polyolefin-polyaminsuccinimid	≤ 2.5%
	Zinc dialkyl dithiophosphate	≤ 2.5%

3 Hazards identification

· **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to the calculation procedure of international guidelines.

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

May cause sensitisation by skin contact.

Repeated exposure may cause skin dryness or cracking.

· **NFPA ratings (scale 0 - 4)**



Health = 0

Fire = 2

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**

HEALTH	0
FIRE	2
REACTIVITY	0

Health = 0

Fire = 2

Reactivity = 0

4 First aid measures

· **General information:**

Immediately remove any clothing soiled by the product.

Take affected persons out into the fresh air.

· **After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

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- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; immediately call for medical help.
- **Information for doctor:** Danger of aspiration

5 Fire fighting measures

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray.
Foam
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the material, its products of combustion or resulting gases:**
In case of fire, the following can be released:
Carbon monoxide (CO)
In certain fire conditions, traces of other toxic gases cannot be excluded.
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Cool endangered receptacles with water spray.
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Person-related safety precautions:**
Keep away from ignition sources
Keep people at a distance and stay upwind.
- **Measures for environmental protection:**
Do not allow to penetrate the ground/soil.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
Send for recovery or disposal in suitable receptacles.
- **Additional information:** See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Keep away from heat and direct sunlight.
Store in cool, dry place in tightly closed receptacles.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in unopened original receptacles.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store receptacle in a well ventilated area.

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Store in a cool place.

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8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with limit values that require monitoring at the workplace:**

Mineral oil mist

TLV (ACGIH)	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Do not inhale gases / fumes / aerosols.

Avoid close or long term contact with the skin.

Use skin protection cream for skin protection.

Be sure to clean skin thoroughly after work and before breaks.

Do not eat or drink while working.

Immediately remove all soiled and contaminated clothing.

Do not carry product impregnated cleaning cloths in trouser pockets.

· **Breathing equipment:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A/P2

· **Protection of hands:**

Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

Preventive skin protection by use of skin-protecting agents is recommended.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **General Information**

Form:	Fluid
Color:	Brown
Odor:	Characteristic

· **Change in condition**

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Undetermined.

· **Flash point:** 63°C (145°F)

· **Ignition temperature:** 240°C (464°F)

· **Auto igniting:** Product is not selfigniting.

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· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: 0.6 Vol %

Upper: 7.0 Vol %

· **Density at 20°C (68°F):** 0.822 g/cm³

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

· **Viscosity:**

Kinematic at 40°C (104°F): 11.6 mm²/s

· **Solvent content:**

Organic solvents: 73.0 %

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:**

 No decomposition if used and stored according to specifications.

· **Materials to be avoided:** Oxidizing agents

· **Dangerous reactions:** No dangerous reactions known.

· **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Naphtha (petroleum), hydrodesulfurized heavy

Oral	LD50	> 2000 mg/kg (rat)
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Dermal	LD50	> 2000 mg/kg (rabbit)
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· **Primary irritant effect:**

· **on the skin:** Irritant to skin

· **on the eye:** No irritating effect.

· **Sensitization:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Irritant

12 Ecological information

· **Information about elimination (persistence and degradability):** No Data

· **Behavior in environmental systems:**

· **Mobility and bioaccumulation potential:** May be accumulated in organism

· **Ecotoxicological effects:**

· **Acquatic toxicity:**

Naphtha (petroleum), hydrodesulfurized heavy

EC50	> 100 mg/l (daphnia)
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IC50	> 10 - < 100 mg/l (algae)
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	> 10 - < 100 mg/l (bacteria)
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LC50	> 10 - < 100 mg/l (fish)
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· **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

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Do not allow product to reach ground water, water course or sewage system.

13 Disposal considerations

· **Product:**

· **Recommendation:**

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:**

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

14 Transport information

· **DOT regulations:**

· **Hazard class:**

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· **Identification number:**

NA1993

· **Proper shipping name (technical name):** COMBUSTIBLE LIQUID, N.O.S (Naphtha (petroleum), hydrodesulfurized heavy)

· **Land transport ADR/RID (cross-border):**

· **ADR/RID class:**

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· **Maritime transport IMDG:**

· **IMDG Class:**

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· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:**

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15 Regulations

· **SARA Title III**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **TSCA Section 12(b) Export Notification (40 CFR 707, Subpart D):**

None of the ingredients is listed.

· **California Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

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· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Xi Irritant

· **Hazard-determining components of labelling:**

Naphtha (petroleum), hydrodesulfurized heavy
Benzenesulfonic acid, propenated, calcium salt, overbased
Benzenesulfonic acid, C10-60-alkyl derivs., calcium salts

· **Risk phrases:**

May cause sensitisation by skin contact.
Repeated exposure may cause skin dryness or cracking.

· **Safety phrases:**

Keep out of the reach of children.
Avoid contact with skin.
Wear suitable gloves.
If swallowed, seek medical advice immediately and show this container or label.
Dispose of this material and its container to hazardous or special waste collection point.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing MSDS:** Chemical Check Hungary Kft.

· **Contact:** Dr. Zsuzsa Zilahy

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