

**Safety data sheet**  
**complying with Regulation 1907/2006/EC (REACH Regulation),**  
**EU 2020/878 and Regulation No 1272/2008/EC (CLP)**

Printing date 15.06.2021

Version number 3 (replaces version 2)

Revision: 15.06.2021

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name:** PENETRON® PUMP FLUSH**UFI:** 2050-M0CF-U00T-6SN2**1.2 Relevant identified uses of the substance or mixture and uses advised against**

No further relevant information available.

**Application of the substance / the mixture:** Solvent-free equipment cleaning fluid**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

PENETRON HELLAS S.A. G.E.MH. No: 07278001000

50, THRAKOMAKEDONON AV., 136 79 ACHARNES, GREECE

TEL.: +30 210 2448250 - FAX: + 30 210 2476803

Email: info@penetron.gr Site: www.penetron.gr

**1.4 Emergency telephone number:**

European Emergency Tel.: 112

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**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation EC No 1272/2008 CLP:**

GHS07

Eye Irrit. 2

H319 Causes serious eye irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

**2.2 Label elements****Labelling according to Regulation EC No 1272/2008 CLP:**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms:**

GHS07

**Signal word:** Warning**Hazard statements:**

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

P102 Keep out of reach of children.

P264 Wash thoroughly after handling.

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P273 Avoid release to the environment.  
P280 Wear eye protection / face protection  
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.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.\* **SECTION 3: Composition/information on ingredients****3.2 Mixtures****Description:** Mixture: consisting of the following components.**Ingredients according Regulation (EU) 2020/878:**

CAS: 1119-40-0 EINECS: 214-277-2	Pentanedioic acid, 1,5-dimethyl ester	55-65%
	CTS-15-072 ⚠ Eye Irrit. 2, H319; Aquatic Chronic 3, H412	10-30%
CAS: 106-65-0 EINECS: 203-419-9	dimethyl succinate	10-25%

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information:**

Take affected persons out into the fresh air.

In all cases call a doctor

**After inhalation:**

If breathing is difficult, remove to fresh air. Restore breathing. Keep warm and quiet. Notify physician.

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Seek medical treatment in case of complaints.

**After skin contact:**

Wash the skin immediately with soap and water.

If skin irritation continues, consult a doctor.

**After eye contact:**

Rinse opened eye for at least 15 minutes under running water.

Remove contact lenses and continue rinsing for several minutes

If symptoms persist, consult a doctor.

Avoid strong water jet-risk of cornea damage, consult a doctor.

**After swallowing:**

Do not induce vomiting.

Rinse out mouth and then drink plenty of water.

Never give anything by mouth to an unconscious person.

Seek immediate medical advice.

**4.2 Most important symptoms and effects, both acute and delayed**

Eye contact may cause eye irritation with discomfort, tearing, or blurring of vision.

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Skin contact may cause skin irritation with discomfort or rash.

Inhalation may cause irritation of the upper respiratory passages, with coughing and discomfort. Some individuals who have been overexposed by inhalation or skin contact experienced blurry vision.

**4.3 Indication of any immediate medical attention and special treatment needed**

The mechanism of blurred vision in humans is unknown. Based on observed effects from animal studies, some symptoms of pre-existing eye disease could be aggravated by overexposure to this material.

Activated charcoal mixture may be beneficial. Suspend 50g activated charcoal in 400 ml water and mix well. Administer 5 ml/kg, or 350 ml for an average adult.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:**

Use fire-extinguishing media appropriate for surrounding materials.

Flood with large amounts of water, and water spray may be used to cool down containers exposed to fire.

CAUTION: Use of water spray when fighting fire may be inefficient.

**5.2 Special hazards arising from the substance or mixture**

Keep containers tightly closed. Isolate from all sources of ignition.

In a fire nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>) can be released.

Carbon monoxide (CO)

Carbon dioxide (CO<sub>2</sub>)

Carbon oxides

**5.3 Advice for firefighters****Protective equipment:**

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Cool closed containers exposed to fire by spraying water.

**Additional information**

Slight fire hazard when exposed to heat or flame.

Wear self-contained breathing apparatus for confined spaces and where there is exposure to vapors.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures:**

Wear protective equipment. Keep unprotected persons away.

Avoid inhalation of vapors.

Avoid contact with skin and eyes.

Ensure adequate ventilation.

**6.1.1 For non-emergency personnel** Avoid contact with dripping or leaking material

**6.1.2 For emergency responders**

First-aid responders must wear protective clothing, gloves, goggles and respiratory device with filter type A.

**6.2 Environmental precautions:** See section 12 for Ecological Information.

**6.3 Methods and material for containment and cleaning up:**

Use explosion proof equipment. Shut off valves, contain spill and keep out of water sources/sewers. For smaller spills, add non-flammable absorbent material in spill area.

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Oxidizing material. Poisonous solid. Stop leak if without risk. Do not get water inside container.

Avoid contact with a combustible material (wood, paper, oil, clothing). Keep substance damp using water spray.

Do not touch spilled material. Use water spray to reduce vapors. Call for assistance on disposal.

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**6.4 Reference to other sections:**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Ensure good ventilation.

Avoid contact with skin and eyes.

Avoid inhaling vapors.

Do not eat, drink or smoke during the usage of the product.

Wash hands before each break and after finishing work.

**Information about fire - and explosion protection:**

This material presents a slight fire hazard.



Keep ignition sources away - Do not smoke.

Keep away from heat, sparks, open flames and hot surfaces.

**7.2 Conditions for safe storage, including any incompatibilities****Storage:**

Do not store above 120°F (49°C). Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106.

Keep containers tight and upright to prevent leakage.

**Requirements to be met by storerooms and receptacles:**

Containers should be Bonded and Grounded when pouring.

Avoid free fall of liquid in excess of a few inches.

Empty containers release residue and can be dangerous.

Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner.

**Information about storage in one common storage facility:**

Do not store together with acids.

Store away from oxidising materials.

Do not store with alkalis

**Further information about storage conditions:**

Keep container tightly sealed.

Keep away from children

**7.3 Specific end use(s)** No further relevant information available.

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**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**8.2 Exposure controls****8.2.1. Appropriate engineering controls**

Showers, eyewash stations, ventilation systems. Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in

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accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

**Individual protection measures, such as personal protective equipment****General protective and hygienic measures:**

Consider the potential hazards of this material (Section 3), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

Do not eat, drink or smoke while using the product.

Avoid contact with skin and eyes.

Keep away from foodstuffs, beverages and feed.

Do not breathe vapours or mists.

Wash hands before breaks and at the end of work.

**Respiratory protection:**

In case of insufficient ventilation use suitable respiratory protective device.

**Hand protection**

Protective gloves resistant to chemicals (standard EN 374-1)

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

**Material of gloves** Butyl rubber

**Penetration time of glove material**

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

**Eye/face protection**

Tightly sealed goggles (EN 166).

**Body protection:**

Chemical resistant protective suit.

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

**Physical state**

Liquid

**Colour:**

Not determined

**Odour:**

Sweetish

**Odour threshold:**

Not determined

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<b>Melting point/freezing point:</b>	-4 °C Not determined
<b>Boiling point or initial boiling point and boiling range</b>	195-230 °C Not determined
<b>Flammability</b>	Not applicable
<b>Lower and upper explosion limit</b>	
<b>Lower:</b>	0.9 Vol %
<b>Upper:</b>	8.0 Vol %
<b>Flash point:</b>	100 °C Not Flammable
<b>Auto-ignition temperature:</b>	Product is not selfigniting.
<b>Decomposition temperature:</b>	Not determined
<b>pH</b>	Not determined
<b>Viscosity:</b>	
<b>Kinematic viscosity</b>	Not determined
<b>Kinematic viscosity</b>	
<b>Dynamic:</b>	Not determined
<b>Solubility</b>	
<b>water:</b>	5,3% 20°
<b>Partition coefficient n-octanol/water (log value)</b>	Not determined
<b>Vapour pressure at 20 °C:</b>	0.2 mmHg
<b>Density and/or relative density</b>	
<b>Density:</b>	Not determined
<b>Relative density at 20 °C</b>	1.092
<b>Vapour density</b>	Not determined
<b>9.2 Other information</b>	
<b>Appearance:</b>	
<b>Form:</b>	Liquid
<b>Important information on protection of health and environment, and on safety.</b>	
<b>Auto-ignition temperature:</b>	370 °C Not determined
<b>Explosive properties:</b>	Product does not present an explosion hazard.
<b>Cloud point / clarification point:</b>	
<b>Oxidising properties</b>	Not considered as oxidising.
<b>Evaporation rate at 20 °C</b>	>1 (n-Butyl Acetate=1)

**Information with regard to physical hazard classes**

<b>Explosives</b>	Void
<b>Flammable gases</b>	Void
<b>Aerosols</b>	Void
<b>Oxidising gases</b>	Void
<b>Gases under pressure</b>	Void
<b>Flammable liquids</b>	Void
<b>Flammable solids</b>	Void
<b>Self-reactive substances and mixtures</b>	Void
<b>Pyrophoric liquids</b>	Void
<b>Pyrophoric solids</b>	Void

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<b>Self-heating substances and mixtures</b>	Void
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	Void
<b>Oxidising liquids</b>	Void
<b>Oxidising solids</b>	Void
<b>Organic peroxides</b>	Void
<b>Corrosive to metals</b>	Void
<b>Desensitised explosives</b>	Void

### SECTION 10: Stability and reactivity

**10.1 Reactivity** Stable under normal conditions

**10.2 Chemical stability** Material is stable under normal conditions.

**Thermal decomposition / conditions to be avoided** Stable at environment temperature.

**10.3 Possibility of hazardous reactions** No dangerous reactions known.

**10.4 Conditions to avoid**

The product should not be exposed to high temperatures, sparks, flame and electrostatic charges.

**10.5 Incompatible materials**

Strong oxidising substances.

Alkalis

Acids

**10.6 Hazardous decomposition products** Toxic gases and vapors may be released if involved in a fire.

### SECTION 11: Toxicological information

**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Oral LD50 (Rat)= 8191 mg/kg.

Dermal LD50 (Rabbit)= 2250 mg/kg.

Inhalation LC50 (Rat)= 11 mg/L 4 h

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

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/irritation** Causes serious eye irritation.

**Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

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

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

**STOT-single exposure** Based on available data, the classification criteria are not met.

**STOT-repeated exposure** Based on available data, the classification criteria are not met.

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

**Additional toxicological information:**

**Repeated dose toxicity** Based on available data, the classification criteria are not met.

**11.2 Information on other hazards**

**Endocrine disrupting properties**

None of the ingredients is listed.

### SECTION 12: Ecological information

**12.1 Toxicity**

Oral LD50 (Rat)= 8191 mg/kg.

Dermal LD50 (Rabbit)= 2250 mg/kg.

Inhalation LC50 (Rat)= 11 mg/L 4 h

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**Aquatic toxicity:** No further relevant information available.**12.2 Persistence and degradability**

Fathead Minnows: LC50 96 hour 18-24 mg/L.

Daphnia Magna (Water Flea): LC50 48 hour 112-150 mg/L.

**Other information:**

Dimethyl glutarate (1119-40-0): 70% biodegradability in day 7.

CTS-15-072 (Trade Secret): 58% biodegradability in day 7 and 84% biodegradability in day 14.

Dimethyl succinate (106-65-0): 67% biodegradability in day 7.

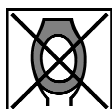
**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.**12.7 Other adverse effects****Remark:** Harmful to fish**Additional ecological information:****General notes:**

The product contains materials that are harmful to the environment.

Harmful to aquatic organisms

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation**

Dispose according to National Regulations.



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

Contact manufacturer for recycling information.

Dispose according local and international regulations

**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN number or ID number**

ADR, ADN, IMDG, IATA

Void

**14.2 UN proper shipping name**

ADR, ADN, IMDG, IATA

Void

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**14.3 Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class** Void**14.4 Packing group****ADR, IMDG, IATA** Void**14.5 Environmental hazards:****Marine pollutant:** No**14.6 Special precautions for user** Not applicable.**14.7 Maritime transport in bulk according to IMO instruments** Not applicable.**UN "Model Regulation":** Void

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**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH Regulation 1907/2006/EC

Regulation (EU) 2020/878

CLP Regulation 1272/2008/EC

Directive 98/24/EC on the protection of health and safety of workers from the risks related to chemicals agents at work.

Council Directive 94/33/EC on the protection of young people at work, as amended.

Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding, as amended

**Directive 2012/18/EU****Named dangerous substances - ANNEX I** Does not contain named substances.**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3**National regulations:****Other regulations, limitations and prohibitive regulations****Substances of very high concern (SVHC) according to REACH, Article 57**

It doesn't contain substances of very high concern (SVHC).

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**SECTION 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.

**Relevant phrases**

H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

**Training hints**

Suitable training on safety in handling, storing and converting the product should be given to the employees based on all the existing information.

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**Department issuing SDS:**

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**Version number of previous version: 2****Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

**\* Data compared to the previous version altered.**

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