

**1. Identification of the product and of the company**

Identification of the product: P999 HEPU Coolant Additive  
P999 HEPU Coolant Agent  
P999 HEPU Antifreeze

Company / undertaking identification: HEPU Autoteile GmbH  
Am Kreuzweg 2  
**D-32689 Kalletal-Hohenhausen**

Tel.: ++49 (0) 5264-6483-0  
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**2.) Composition/information on ingredients:**

**Chemical characterisation:**

Mixture of Monoethylenglykol and anticorrosive inhibitors

CAS no. 000107-27-1

Dilution (Conz. -30°C) 000107-21-1

Hazard classification: XN

R-phrases: R22

NFPA code: N.B.

Formula: N.A.

**3.) Hazards identification:**

Harmful if swallowed

**4.) First aid measures:**

After inhalation: Remove victim into fresh air  
Unconscious: maintain adequate airway and respiration  
Consult a doctor/medical service if breathing problems develop  
Skin contact: Wash immediately with lots of water and soap  
Eye contact: Rinse immediately with plenty of water for 15 minutes  
Consult a doctor/medical service if irritation persists  
After ingestion: Immediately give lots of water to drink (never to an unconscious person)  
Consult a doctor/medical service if you feel unwell

**5.) Fire-fighting measures:**

Suitable extinguishing media: water, polyvalent foam, alcohol foam, Polymer foam, BC foam

**6.) Accidental release measures:**

Personal protection: see 8

**Environmental precautions:**

Prevent soil and water pollution

Do not discharge into the sewer

**Clean-up:**

Take up liquid spill into a non combustible material.

**7.) Handling and storage:**

**Handling:**

Observe normal hygienic standards

**Fire and explosion prevention :**

Durch Hitze gefährdete Behälter mit Wasser kühlen

**Storage:**

Keep container tightly closed, in a dry area

The storage in galvanized containers is not recommended

**8.) Exposition delimitation and personal protection equipment:**

**Additional references to the organization of technical plants:**

(see 7)

**Components with job referred to supervising limit values:**

Contains: Ethylene glycol

**Personal protection:**

Gloves:

Rubber gloves

Eye protection:

Safety glasses

Skin protection:

Protective clothing

General protection and hygiene measures:

The precautionary measures usual while handling chemicals are to be considered. Women at the age capable of child-bearing should avoid the contact with the product.

**9.) Physical and chemical characteristics**

Appearance: liquid

Color: according to specification

Odour: almost odourless

Bioiling point: >165°C (ASTM D1120)

Melting point: ca. -15°C (DIN-ISO 3016)

Flashpoint: >120°C (DIN 51758)

Explosion limits:

-low 3% Vol.

-high 15% Vol.

Auto-ignition point: >200°C (DIN 51794)

Vapour pressure at 20°C: ca. 2mbar

Relative density at 20°C: 1,121. bis 1,125

Water solubility: completely

Soluble in: ethanol, acetone, acetic acid, glycerol, pyridine

PpH value (33 % in water, 20°C): 8,2 (ASTM D 1287)

Viscosity at 20°C: 20-30 mm<sup>2</sup>/s (DIN 51562)

**10.) Stability and reactivity:**

Dangerous reaction with HNO<sub>3</sub> in high concentration

**Reaction product :**

Nitric acid

Dangerous decomposition products:

In accordance with certain processing, none.

**11.) Toxicological information**

**Acute toxicity:**

LD50 oral rat: >2000 mg/kg

Dermal rabbit OECD 404: not provoking

Mucous membrane rabbit OECD 405: not provoking

**Sensibility:**

N. D.

Experience at humans:

Lethal dose by ingestion is ca. 1,5g/kg bodyweight

Reaction on lower dose: Consciousness disturbances, damages at kidneys, damages of the central nervous system

Irritation of the eye tissue

**12.) Ecological information**

**Biodegradation:**

Testet with OECD 302B/ ISO 9888/ EEC 88/302, C

Grade of elimination: > 70%

Bewertung: readily biodegradable in water

**Bioaccumulation:**

Slightly bioaccumulative

**13.) Waste disposal considerations**

**Product:**

Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber

Obtain the consent of pollution control authorities before discharging to wastewater treatment plants

Do not discharge into surface water

Waste code (EC): 07 01 04

**Ungereinigte Verpackungen:**

Nicht kontaminierte Verpackungen können wiederverwendet werden.

Nicht reinigungsfähige Verpackungen sind wie der Stoff zu entsorgen.

**14.) Transport information**

not restricted for any mode of international transport

**15.) Regulatory information**

**Labeling in accordance with EC directives 67/548/EEC and 88/379/EEC:**

Xn – harmful

R22 – harmful if swallowed.

S2 – keep out of reach of children.

S24/25 – Berührung mit den Augen und der Haut vermeiden.

S46 – if swallowed, seek medical advice immediately and show this container or label.

**16.) Other information**

The information provided in this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.