



Radiator Flush

Print date: 30.09.2011

Product code: 270

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Radiator Flush

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Cleaning agent for radiators

Details of the supplier of the safety data sheet

Company name: CTP-GmbH
Street: Saalfelder Straße 35
Place: D-07338 Leutenberg
Telephone: +4936734/230-0 Telefax: +4936734/230-22
e-mail: hotline@ctp-gmbh.de
Contact person: Jens Moeller, Dipl.-Chem. Telephone: +4936734/230-19
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Further Information

Article Number: 33326, 33320, 33321, 33322

SECTION 2: Hazards identification

Classification of the substance or mixture

Indications of danger : Corrosive
R-phrases:
Causes severe burns.

Label elements

Danger symbols: C - Corrosive



C - Corrosive

R phrases

35 Causes severe burns.

S phrases

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
01/02 Keep locked up and out of the reach of children.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

SECTION 3: Composition/information on ingredients

Mixtures

Chemical characterization

Organic and inorganic acids
corrosion preventing agent
Cleaning agent.

Sum of ingredients:
70 - 85 %



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Hazardous components

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
226-218-8	sulfamic acid, sulphamic acid, sulphamidic acid	10 - 15 %
5329-14-6	Xi R36/38-52-53	
016-026-00-0	Eye Irrit. 2, Skin Irrit. 2, Aquatic Chronic 3; H319 H315 H412	
201-069-1	citric acid	1 - 5 %
5949-29-1	Xi R36	
	Eye Irrit. 2; H319	

Full text of R- and H-phrases: see section 16.

SECTION 4: First aid measures

Description of first aid measures

General information

Move victim out of danger zone and lay down. Move victim to fresh air. Put victim at rest and keep warm.
Immediately remove any wetted clothing, shoes or stockings.

After inhalation

Provide fresh air. In case of difficulties of breathing consult physician.

After contact with skin

Change contaminated clothing. After contact with skin, wash immediately with plenty of Water and soap.
Wash contaminated clothing prior to re-use.

After contact with eyes

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart.
Consult physician.

After ingestion

Rinse mouth immediately and drink large quantities of water.
Do not induce vomiting. Consult physician.

Most important symptoms and effects, both acute and delayed

Irritant effect on the skin: Irritation and etching.
Following eye contact: Risk of serious damage to eyes.
After ingestion: Harmful. Irritation and etching.

Indication of any immediate medical attention and special treatment needed

Following symptoms can occur:
Coughing. Nausea. shortage of breath. Belly-ache.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

Extinguishing powder. Sand. alcohol resistant foam.

Extinguishing media which must not be used for safety reasons

High power water jet.

Special hazards arising from the substance or mixture

Sulphur dioxide (SO₂). Nitrogen oxides (NO_x). Ammonia.



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Additional information

Contaminated fire-fighting water must not get into the sewerage network. Contaminated fire-fighting water must be collected separately.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with skin and eyes.

Environmental precautions

Do not empty into drains or the aquatic environment. In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

Methods and material for containment and cleaning up

Prevent spreading of spillages (e.g. by oil barrier).
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

SECTION 7: Handling and storage

Precautions for safe handling

Advice on safe handling

Keep container tightly closed in a cool place.
Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Advice on storage compatibility

Do not store together with: Alkalis (alkalis).

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure controls

Protective and hygiene measures

Take off immediately all contaminated clothing
Avoid contact with skin and eyes.

Hand protection

Tested protective gloves are to be worn: Butyl rubber.

Eye protection

Wear tightly sealed safety glasses against possible splashes into the eyes.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	liquid, clear
Colour:	light yellow
Odour:	odourless

pH-Value (at 20 °C):	0-1
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Changes in the physical state

Melting point:	< 0 °C
Boiling point:	> 100 °C
Density (at 20 °C):	1,07 g/cm ³

Test method



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Water solubility:
(at 20 °C) easily soluble.

SECTION 10: Stability and reactivity

Conditions to avoid

No decomposition when used as intended.

Incompatible materials

Oxidizing agents. Alkalis (alkalis), concentrated.

Hazardous decomposition products

Sulphur dioxide (SO₂), nitrogen oxides (NO_x), Ammonia.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

CAS No.	Chemical name				
	Exposure routes	Method	Dose	Species	h
5329-14-6	sulfamic acid, sulphamic acid, sulphamidic acid				
	Acute oral toxicity	LD50	3160 mg/kg	Ratte	
5949-29-1	citric acid				
	Acute oral toxicity	LD50	5400 mg/kg	mouse.	
	Acute dermal toxicity	LD50	>2000 mg/kg	rat.	

Irritation and corrosivity

Irritant effect on the skin: Irritation and etching

Following eye contact: Risk of serious damage to eyes.

Sensitizing effects

none

SECTION 12: Ecological information

Toxicity

CAS No.	Chemical name				
	Aquatic toxicity	Method	Dose	Species	h
5329-14-6	sulfamic acid, sulphamic acid, sulphamidic acid				
	Acute fish toxicity	LC50	70,3 mg/l	Pimephales promelas	96
5949-29-1	citric acid				
	Acute fish toxicity	LC50	440 mg/l	Leuciscus idus	96
	Acute algae toxicity	ErC50	425 mg/l	Scenedesmus subspicatus	96
	Acute crustacea toxicity	EC50	1535 mg/l	Daphnia magna	48

Further information

Do not empty into drains or the aquatic environment.

product is acid. The product needs to apply neutralizing agents before draining to wastewater treatment plants.

SECTION 13: Disposal considerations

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Waste treatment methods

Advice on disposal

Do not dispose with household waste.
Do not empty into drains or the aquatic environment.
Arrange about the exact waste code with the local waste disposal expert.
product is acid. The product needs to apply neutralizing agents before draining to wastewater treatment plants.

SECTION 14: Transport information

Land transport (ADR/RID)

UN number: UN2967
UN proper shipping name: SULPHAMIC ACID
Transport hazard class(es): 8
Packing group: III
Hazard label: 8



Classification code: C2
Special Provisions: -
Limited quantity: 5 kg
Transport category: 3
Hazard-no.: 80
Tunnel restriction code: E

Inland waterways transport

UN number: UN2967
UN proper shipping name: SULPHAMIC ACID
Transport hazard class(es): 8
Packing group: III
Hazard label: 8



Classification code: C2
Special Provisions: -
Limited quantity: 5 kg

Marine transport

UN number: UN2967
UN proper shipping name: SULPHAMIC ACID
Transport hazard class(es): 8
Packing group: III
Hazard label: 8



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Marine pollutant: -
Special Provisions: -
Limited quantity: 5 kg
EmS: F-A, S-B

Air transport

UN/ID number: UN2967
UN proper shipping name: SULPHAMIC ACID
Transport hazard class(es): 8
Packing group: III
Hazard label: 8



Special Provisions: -
Limited quantity Passenger: 5 kg
IATA-packing instructions - Passenger: 860
IATA-max. quantity - Passenger: 25 kg
IATA-packing instructions - Cargo: 864
IATA-max. quantity - Cargo: 100 kg

Environmental hazards

Dangerous for the environment: no

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Additional information

Contains:
5 - 15 % nonionic tensides
< 5 % anionic tensides

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

35 Causes severe burns.
36 Irritating to eyes.
36/38 Irritating to eyes and skin.
52 Harmful to aquatic organisms.
53 May cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.



Safety Data Sheet
according to Regulation (EU) No. 1907/2006
power
max



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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)