

## Radiator Flush

Revision date: 30.06.2020

Product code: 1307

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

#### 1.1. Product identifier

Radiator Flush

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Use of the substance/mixture

Cleaning agent for radiators

#### 1.3. Details of the supplier of the safety data sheet

Company name:	CTP GmbH	
Street:	Saalfelder Strasse 35h	
Place:	D-07338 Leutenberg	
Telephone:	+49 (0)36734 230-0	Telefax: +49 (0)36734 230-22
e-mail:	msds@bluechemgroup.com	
Contact person:	Jens Moeller, Dipl.-Chem.	Telephone: +49 (0)36734 230-19
Internet:	www.bluechemgroup.com	

#### 1.4. Emergency telephone number:

GBK GmbH: +49-(0)6132-84463 (24/7)

#### Further Information

Article Number: 33320, 33321, 33322, 33325, 33326

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

#### 2.2. Label elements

##### Regulation (EC) No. 1272/2008

Signal word: Warning

Pictograms:



##### Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.

##### Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P302+P352	IF ON SKIN: Wash with plenty of water.
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 this material and its container to hazardous or special waste collection point.

Labelling of packages where the contents do not exceed 125 ml

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Signal word:

Warning

Pictograms:



### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Organic and inorganic acids  
corrosion preventing agent  
Cleaning agent.

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
5329-14-6	sulfamic acid, sulphamic acid, sulphamidic acid			10 - < 15 %
	226-218-8		01-2119488633-28	
	Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3; H315 H319 H412			
5949-29-1	citric acid			1 - < 5 %
	201-069-1		01-2119457026-42	
	Eye Irrit. 2; H319			

Full text of H and EUH statements: see section 16.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove affected person from the danger area 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 plenty of water.  
Do NOT induce vomiting. Consult physician.

### 4.2. Most important symptoms and effects, both acute and delayed

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



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### 4.3. Indication of any immediate medical attention and special treatment needed

The following symptoms may occur:

Coughing. Nausea. shortage of breath. Belly-ache.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Extinguishing powder. Sand. alcohol resistant foam.

#### Unsuitable extinguishing media

High power water jet.

### 5.2. Special hazards arising from the substance or mixture

Sulphur dioxide (SO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Ammonia.

### 5.3. Advice for firefighters

No information available.

#### 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

### 6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with skin and eyes.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

### 6.3. 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).

### 6.4. Reference to other sections

No data

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Keep container tightly closed in a cool place.

Avoid contact with skin and eyes.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Hints on joint storage

Do not store together with: Alkalies (alkalis).

### 7.3. Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

### 8.2. Exposure controls

#### Protective and hygiene measures

Remove contaminated, saturated clothing immediately.

Avoid contact with skin and eyes.



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#### Eye/face protection

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

#### Hand protection

Tested protective gloves are to be worn: Butyl rubber.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state:	liquid, clear
Colour:	light yellow
Odour:	odourless
pH-Value (at 20 °C):	0,5 - 2,5

#### Changes in the physical state

Melting point:	< 0 °C
Initial boiling point and boiling range:	> 100 °C
Density (at 20 °C):	1,07 g/cm <sup>3</sup>
Water solubility: (at 20 °C)	easily soluble.

#### 9.2. Other information

No data

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No information available.

#### 10.2. Chemical stability

No decomposition when used as intended.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions are known.

#### 10.4. Conditions to avoid

No information available.

#### 10.5. Incompatible materials

Oxidizing agents. Alkalies (alkalis), concentrated.

#### 10.6. Hazardous decomposition products

Sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), Ammonia.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity

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

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
5329-14-6	sulfamic acid, sulphamic acid, sulphamidic acid				
	oral	LD50 3160 mg/kg	Rat		
5949-29-1	citric acid				
	oral	LD50 5400 mg/kg	mouse.		
	dermal	LD50 >2000 mg/kg	Rat		

### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

### Sensitising effects

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

### Carcinogenic/mutagenic/toxic effects for reproduction

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.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

### 12.2. Persistence and degradability

No information available.

### 12.3. Bioaccumulative potential

No information available.

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. Other adverse effects

No information available.

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### Further information

Do not allow to enter into surface water or drains.

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

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Do not dispose with household waste.

Do not allow to enter into surface water or drains.

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)

#### 14.1. UN number:

UN 3264

#### 14.2. UN proper shipping name:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
SULPHAMIC ACID

#### 14.3. Transport hazard class(es):

8

#### 14.4. Packing group:

III

Hazard label:

8



Classification code:

C1

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

Transport category:

3

Hazard No:

80

Tunnel restriction code:

E

### Inland waterways transport (ADN)

#### 14.1. UN number:

UN 3264

#### 14.2. UN proper shipping name:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
SULPHAMIC ACID

#### 14.3. Transport hazard class(es):

8

#### 14.4. Packing group:

III

Hazard label:

8



Classification code:

C1

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

### Marine transport (IMDG)

#### 14.1. UN number:

UN 3264

#### 14.2. UN proper shipping name:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
SULPHAMIC ACID

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### 14.3. Transport hazard class(es):

8

### 14.4. Packing group:

III

Hazard label:

8



Marine pollutant:

-

Special Provisions:

223, 274

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-B

### Air transport (ICAO-TI/IATA-DGR)

### 14.1. UN number:

UN 3264

### 14.2. UN proper shipping name:

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
SULPHAMIC ACID

### 14.3. Transport hazard class(es):

8

### 14.4. Packing group:

III

Hazard label:

8



Special Provisions:

A3 A803

Limited quantity Passenger:

1 L

Passenger LQ:

Y841

Excepted quantity:

E1

IATA-packing instructions - Passenger:

852

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

856

IATA-max. quantity - Cargo:

60 L

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### 14.6. Special precautions for user

No information available.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

## SECTION 15: Regulatory information

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

#### EU regulatory information

#### Additional information

Contains:

5 - 15 % nonionic tensides

< 5 % anionic surfactants

#### National regulatory information

Water hazard class (D):

1 - slightly hazardous to water

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.



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#### SECTION 16: Other information

##### Changes

This data sheet contains changes from the previous version in section(s): 1,2,9,11,14.

##### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

##### Relevant H and EUH statements (number and full text)

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 the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

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

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