

# SAFETY DATA SHEET RADIATOR FLUSH

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

1.1. Product identifier

Product name RADIATOR FLUSH

Product number GAF301, RAF301, SRF300, RRF301, CNR301

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

Identified uses Car maintenance product.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED

Bury Lancashire England BL9 7NY 0161 764 5981 0161 797 5899 info@tetrosyl.com

Manufacturer TETROSYL LIMITED

Bury Lancashire England BL9 7NY 0161 764 5981 0161 797 5899 info@tetrosyl.com

1.4. Emergency telephone number

**Emergency telephone** +44 (0)161 764 5981

# SECTION 2: Hazards identification

# 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314

Environmental hazards Not Classified

2.2. Label elements

**Pictogram** 



Signal word Danger

# **RADIATOR FLUSH**

**Hazard statements** H314 Causes severe skin burns and eye damage.

**Precautionary statements** P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P260 Do not breathe vapour/ spray.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor.

P264 Wash contaminated skin thoroughly after handling.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with national regulations.

Contains DISODIUM METASILICATE, PHOSPHORIC ACID 100%

Supplementary precautionary

statements P321 Specific treatment (see medical advice on this label).

P363 Wash contaminated clothing before reuse.

#### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

# SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

DISODIUM METASILICATE 5-<10%

CAS number: 10213-79-3 EC number: 229-912-9 REACH registration number: 01-

2119449811-37-0000

Classification

Met. Corr. 1 - H290 Skin Corr. 1B - H314 STOT SE 3 - H335

PHOSPHORIC ACID 100%

Classification

Skin Corr. 1B - H314 Eye Dam. 1 - H318

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BENZENE 0.001 - <0.1%

CAS number: 71-43-2 EC number: 200-753-7

Classification

Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Muta. 1B - H340 Carc. 1A - H350 STOT RE 1 - H372 Asp. Tox. 1 - H304

The full text for all hazard statements is displayed in Section 16.

#### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

General information Get medical attention if any discomfort continues. Move affected person to fresh air and keep

warm and at rest in a position comfortable for breathing. Effects may be delayed. Keep affected person under observation. Remove affected person from source of contamination.

Inhalation If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and

keep warm and at rest in a position comfortable for breathing.

**Ingestion** Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if a

large quantity has been ingested. Show this Safety Data Sheet to the medical personnel.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. Rinse with

water. Get medical attention if any discomfort continues.

**Eye contact** Important! Immediately rinse with water for at least 15 minutes. Remove any contact lenses

and open eyelids wide apart. Get medical attention promptly if symptoms occur after washing.

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

General information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure. Effects may be delayed. Keep affected person under observation.

**Inhalation** No specific symptoms known.

Ingestion May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact Skin irritation. Prolonged or repeated contact with skin may cause irritation, redness and

dermatitis. Blistering may occur.

**Eye contact** Irritating to eyes. Symptoms following overexposure may include the following: Redness.

Pain. May cause blurred vision and serious eye damage.

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

Notes for the doctor 
No specific recommendations. If in doubt, get medical attention promptly.

#### SECTION 5: Firefighting measures

# 5.1. Extinguishing media

Suitable extinguishing media Extinguish with the following media: Foam, carbon dioxide or dry powder. Water. Use fire-

extinguishing media suitable for the surrounding fire.

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

**Specific hazards** No unusual fire or explosion hazards noted.

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Hazardous combustion

Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and

other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during

firefighting

products

No specific firefighting precautions known.

Special protective equipment

for firefighters

Leave danger zone immediately.

#### SECTION 6: Accidental release measures

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

Personal precautions For personal protection, see Section 8. In case of spills, beware of slippery floors and

surfaces. Avoid contact with skin and eyes.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up No specific clean-up procedure recommended.

#### 6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see section 13.

# SECTION 7: Handling and storage

# 7.1. Precautions for safe handling

Usage precautions Good personal hygiene procedures should be implemented. Wash hands and any other

contaminated areas of the body with soap and water before leaving the work site. Avoid eating, drinking and smoking when using the product. Avoid contact with skin and eyes. Do

not handle broken packages without protective equipment.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep containers upright. Store in tightly-closed, original container.

7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

#### SECTION 8: Exposure Controls/personal protection

#### 8.1. Control parameters

#### Occupational exposure limits

No exposure limits known for ingredient(s).

#### **PHOSPHORIC ACID 100%**

Long-term exposure limit (8-hour TWA): WEL 1 mg/m<sup>3</sup> Short-term exposure limit (15-minute): WEL 2 mg/m<sup>3</sup>

### **BENZENE**

Long-term exposure limit (8-hour TWA): WEL 1 ppm

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

#### 8.2. Exposure controls

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#### Protective equipment







Appropriate engineering controls

All handling should only take place in well-ventilated areas.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact. Provide eyewash station.

Hygiene measures

Provide eyewash station and safety shower. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke. Wash hands after contact. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes wet or contaminated. Wash contaminated clothing before reuse.

Respiratory protection

No specific recommendations. Respiratory protection may be required if excessive airborne contamination occurs.

#### SECTION 9: Physical and Chemical Properties

# 9.1. Information on basic physical and chemical properties

**Appearance** Liquid. Colour Yellow.

Melting point Not determined.

>100°C Flash point

**Evaporation rate** Not determined.

Upper/lower flammability or

explosive limits

Not determined.

Vapour pressure Not determined.

Vapour density Not determined.

Relative density 1.05 @ 20°C

Solubility(ies) Soluble in water.

Partition coefficient Not determined.

**Auto-ignition temperature** Not determined.

**Decomposition Temperature** Not determined.

<50 cP @ 20°C Viscosity

Oxidising properties Not available.

9.2. Other information

Other information None.

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# SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity The following materials may react strongly with the product: Alkaline earth metals. Powdered

metal.

10.2. Chemical stability

**Stability** No particular stability concerns.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

Not applicable.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Alkali metals. Powdered metal.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Does not decompose when used and stored as recommended.

#### **SECTION 11: Toxicological information**

# 11.1. Information on toxicological effects

**Toxicological effects** No information available.

Acute and chronic health

This product has low toxicity. Only large quantities are likely to have adverse effects on

hazards human health. This product may cause skin and eye irritation.

#### **SECTION 12: Ecological Information**

**Ecotoxicity** Dangerous for the environment if discharged into watercourses.

12.1. Toxicity

Acute toxicity - fish Not available.

Acute toxicity - aquatic

invertebrates

Not available.

# 12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

# 12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not determined.

12.4. Mobility in soil

Adsorption/desorption

Not available.

coefficient

#### 12.5. Results of PBT and vPvB assessment

# **RADIATOR FLUSH**

Results of PBT and vPvB

assessment

This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not applicable.

## **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

**General information** Waste should be treated as controlled waste.

**Disposal methods**Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority. Confirm disposal procedures with environmental engineer and

local regulations.

# SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods

(IMDG, IATA, ADR/RID).

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

# 14.3. Transport hazard class(es)

No transport warning sign required.

#### Transport labels

No transport warning sign required.

# 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

# Environmentally hazardous substance/marine pollutant

No.

# 14.6. Special precautions for user

Not applicable.

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78

and the IBC Code

# SECTION 15: Regulatory information

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

**EU legislation** Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18

December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

# 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

# **RADIATOR FLUSH**

# SECTION 16: Other information

**Revision comments** NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date 13/02/2014

Revision 22

Supersedes date 31/01/2014 v21

SDS status Approved.

Hazard statements in full H225 Highly flammable liquid and vapour.

H290 May be corrosive to metals.

H304 May be fatal if swallowed and enters airways. H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H318 Causes serious eye damage. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H340 May cause genetic defects.

H350 May cause cancer.

H372 Causes damage to organs through prolonged or repeated exposure.