R-102 FLUSHING CONCENTRATE MATERIAL SAFETY DATA SHEET CONFORMS TO DIRECTIVE 2001/58/EC

IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Identification of the preparation

Product Name:

"R-102 Flushing Concentrate"

Chemical Name:

N/A - This is a mixture/preparation.

CAS No.:

N/A - This is a mixture/preparation.

Chemical Formula:

N/A - This is a mixture/preparation.

EINECS Number:

N/A - This is a mixture/preparation.

1.2. Use of the preparation

The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

1.3. Company identification

Manufacturer/Supplier: ANSUL INCORPORATED

Address:

One Stanton Street, Marinette, WI 54143-2542

Prepared by:

Safety and Health Department

Phone:

715-735-7411

Internet/Home Page:

http://www.ansul.com

Date of Issue:

September, 2009

1.4. Emergency telephone

CHEMTREC 800-424-9300 or 703-527-3887

Composition/Information on Ingredients 2.

2.1. Ingredient Name:

Potassium Carbonate (Potash).

Chemical Formula:

K₂CO₃.

CAS No .:

584-08-7.

EINECS Number:

209-529-3.

Concentration, Wt%:

40-42%.

Hazard Identification:

See Heading 3.

Ingredient Name:

Water.

Chemical Formula:

H₂O.

CAS No.:

7732-18-5.

EINECS Number: Concentration, Wt%: 231-791-2. 58-60%.

Hazard Identification:

See Heading 3.

3. Hazards Identification

FOR HUMANS:

Product:

EU Classification:

Irritant.

R 36/37/38

Irritating to eyes, respiratory system, and skin.

S 26 S 36 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing.

Components:

Potassium Carbonate:

EU Classification:

Harmful.

R 20/21/22

Harmful by inhalation, in contact with skin, and if swallowed.

S 26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36

Wear suitable protective clothing.

Water:

EU Classification:

Not classified as dangerous.

Limit Values for Exposure: None established.

Neither this preparation nor the substances contained in it have been listed as carcinogenic by National Toxicology

Program, I.A.R.C., or OSHA.

SIGNS AND SYMPTOMS:

Acute Exposure:

Eye Contact: Skin Contact: Irritant. Prolonged contact can cause chemical burns. Irritant. Prolonged contact can cause chemical burns.

Inhalation:

Can be irritating to mucous membranes.

Ingestion: Irrit

Irritating to mucous membranes.

Chronic Overexposure: No data available.

Medical Conditions Generally Aggravated by Exposure: None known.

FOR ENVIRONMENT: No data available.

4. First Aid Measures

Eye Contact:

Wash with water for a minimum of 15 minutes. If irritation persists seek medical attention.

Skin Contact:

Wash affected area with soap and water. If irritation persists seek medical attention.

Inhalation:

Remove from exposure. If irritation persists seek medical attention.

Ingestion:

Dilute by drinking large quantities of water.

5. Fire-Fighting Measures

This preparation is an extinguishing media.

There are NO extinguishing media which must not be used for safety reasons.

NO special protective equipment is needed for fire-fighters. Wear protective equipment appropriate for the fire conditions.

6. Accidental Release Measures

Turn off or disconnect electrical sources in the immediate area.

For personal protection: Prevent skin and eye contact, see Heading 8.

Clean up: Use an absorbent material such as diatomaceous earth, sawdust, etc., and sweep up, see Heading 13.

NO harm to the environment is expected from an accidental release of this preparation.

7. Handling and Storage

7.1. Handling

Keep separate from acids. See incompatibility information in Heading 10.

7.2. Storage

NO special conditions are needed for safe storage. See Heading 10 for incompatibilities.

Store in original container. Keep tightly closed until used.

There is minimal danger to the environment from a storage release.

7.3. Specific use

The intended or recommended use of this preparation is as a FIRE EXTINGUISHING AGENT.

8. **Exposure Controls/Personal Protection**

8.1. Exposure limit values

There are NO currently occupational exposure limit values for this preparation or any components.

8.2. Exposure controls

8.2.1. Occupational exposure controls

8.2.1.1. Respiratory protection

Not expected to be needed. Vapors will be water.

8.2.1.2. Hand protection

Use rubber gloves when handling the preparation.

8.2.1.3. Eye protection

Use safety glasses with side shields or safety goggles.

8.2.1.4. Skin protection

No special equipment is needed.

8.2.2. Environmental exposure controls

No special equipment is needed.

Physical and Chemical Properties

9.1. General information

Clear colorless liquid. Appearance:

Odor: None.

9.2. Important health, safety, and environmental information

pH: 11 to 13 (at 25 °C).

Boiling point/boiling range: About 110 °C (About 230 °F).

Flash point: None to boiling. Flammability (solid/gas): Not flammable. Explosive properties: Not explosive. Oxidizing properties: Not an oxidizer.

Vapor Pressure: About 12 mm Hg. About 1.4.

Relative Density (Water = 1):

Solubility:

Completely soluble.

- Water solubility: - Fat solubility: Not soluble. Partition coefficient, n-octanol/water: Not determined. Viscosity: Not determined. Vapor density: Not determined. Evaporation rate (Butyl acetate = 1): N/A.

9.3. Other information

Auto-ignition temperature: Does not ignite.

10. Stability and Reactivity

10.1. Conditions to avoid

There are no known conditions such as temperature, pressure, light, shock, etc., which may cause a dangerous reaction.

10.2. Materials to avoid

Ammonium compounds, acids, corrodible metals (copper, aluminum).

Reactive metals may react with the water in this preparation.

Energized electrical equipment may cause a shock hazard when this fire extinguishing agent is used.

10.3. Hazardous decomposition products

Normally stable.

Hazardous polymerization will not occur.

Combustion or decomposition products include CO2, CO.

11. **Toxicological Information**

Toxicity data has not been determined for this product. Potassium Carbonate: Oral LD₅₀ (rat) = 1870 mg/kg.

Ecological Information 12.

12.1. Ecotoxicity

Not determined.

12.2. Mobility

Not determined.

12.3. Persistence and degradability

Not determined.

12.4. Bioaccumulative potential

Not determined.

12.5. Other adverse effects

Ozone depletion potential:

None. None.

Photochemical ozone creation potential: Global warming potential:

Release of carbon dioxide by thermal decomposition or chemical reaction could

contribute to global warming.

13. **Disposal Considerations**

No harm to the environment is expected from this preparation.

Dispose of in compliance with national, regional, and local provisions that may be in force.

Transport Information

Hazard Class or Division: Not hazardous. There are no special precautions known.

No harm to the environment is expected from this preparation.

Regulatory Information

EU Classification:

Irritant.

Exposure Limit Values:

None.

EINECS Status: EPA TSCA Status: All components are included in EINECS inventory or are exempt from listing. All components are included in TSCA inventory or are exempt from listing.

Canadian DSL (Domestic Substances List): All components are included in the DSL or are exempt from listing. Environmental restrictions:

None are known.

Restrictions on Marketing and Use:

None are known.

Refer to any other national measures that may be relevant.

16. Other Information

EU Classification: Irritant.

R 36/37/38 Irritating to eyes, respiratory system, and skin.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 26

S 36 Wear suitable protective clothing.

The EU Classification has been changed in accordance with Directive 1999/45/EC and information in the EINICS ESIS files (Existing Substances Information System).

Toxicological information added from the EINICS ESIS (Existing Substances Information System).

A rating under WHMIS has been added, following the Canadian guidelines.

(HMIS) HAZARDOUS MATERIAL IDENTIFICATION SYSTEM RATINGS:

HEALTH: 4. Severe Hazard 2 3. Serious Hazard FLAMMABILITY: 0

REACTIVITY: 0 2. Moderate Hazard

1. Slight Hazard

0. Minimal Hazard

(WHMIS) CANADIAN WORKPLACE HAZARDOUS MATERIAL **IDENTIFICATION SYSTEM RATINGS:**

This product is rated: D2B - Product may irritate skin, eyes, or mucous membrane.

Format is from directive 2001/58/EC.

EINECS data is from http://exb.jrc.it/existing-chemicals/

Data used to compile the data sheet is from ANSUL Material Safety Data Sheet, February, 2002.

17. Disclaimer

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT, BUT DOES NOT PURPORT TO BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. ANSUL SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE PRODUCT.

N/A = Not Applicable

NDA = No Data Available