

**MATERIAL SAFETY DATA SHEET**

Page :1

Revised edition no : 01

P-133 COOLING SYSTEM FLUSH

Effective Date: 18-6-2014

1 Identification of the Product and the company

Chemical Name : Cooling System Flush
Type of product chemical family : Cooling System
Use : Cooling-Flush
Producer : TLC-KOYA CHEMICALS MANUFACTURING SDN BHD
No.22 & 23, Jalan Maju 1,
Cemerlang Industrial Estate,
81800 Ulu Tiram, Johor, Malaysia.
Tel: 607-8675798 Fax: 607-8675799
Website: www.koyachemicals.com Email: admin@koyachemicals.com

Emergency phone nr : See producer

2 Hazard Identification

health Hazardous : Harmful if swallowed. Irritating to skin. Risk of serious damage to eyes.
Harmful: danger of serious damage to health, by prolonged exposure and if swallowed.

3 Composition / Information on Ingredients

Hazardous ingredients : Potassium Hydroxide 8%
CAS NO. 1310-58-3

4 First Aid Measures

Inhalation : Remove patient to a clean atmosphere and admister oxygen if it is necessary. Consult a physician immediately.

Skin Contact : Flush exposed are with cool water, if irritation persists, consult a physician immediately.

Eye Contact : Flush eyes for 30 minutes with cool water, if irritation developed, consult a physician immediately.

Ingestion : Do not induce vomiting. Have patient drink large amounts of water or milk. Consult a physician immediately.

5 Fire-Fighting Measures

Fire Hazard : Product is water based and in wet form, its fire hazard is low. The dried product is combustible, decomposition products can be toxic.

Extinguishing media : Water, powder, sand...all extinguishing media are suitable.
Protective clothing and seld-contained breathing equipment should be available for firemen.
To prevent environmental damage, if possible collect water used to extinguish the fire in containers.



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Page :2

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6 Accidental Release Measures

- Personal protection : Wear PVC-gloves and goggles to contain spillage.
Avoid repeated skin contact.
- Environment precautions : Prevent the product contaminating soil and groundwater. Prevent the product entering sewers and waterways.
Cfr. Section 12.
- Cleaning / recovery : Large spillages : contain and pump into containers.
Small spillages : absorb on sand, earth...and collect into containers for disposal. Disposal should always comply with local, national or EEC regulations. Cfr. Section 13.

7 Handling and Storage

- Handling : Good industrial and personal hygiene practice should be followed. No eating and drinking in the workplace. Ensure adequate ventilation.
- Storage : Storage temperature : between +5 and +40°C.
Protect from frost and direct sunlight.
Drums and bottles : material is plastic or steel.
Bulk tanks : stainless steel, plastic coated materials... Clean bulk tanks periodically to prevent accumulation of bacteria.
- Specific use : Use the best available methods of handling our Products whereby the employees enjoy maximum safety and whereby the environment is minimally affected.

8 Exposure Controls / Personal Protection

- Exposure limit values : No danger in normal ambient conditions.
There are no specific limiting values for professional exposure.
There are no biological limiting values.
User should determine the conditions for safe use of the product. Cfr. Section 7 "Handling and Storage".
- Exposure controls:
- Occupational exposure controls : Respiratory protection : not applicable.
Hand protection ; waterproof PVC-gloves (CE)
Eye protection : goggles or safety glasses (CE)
Skin protection : N/A
Avoid repeated skin contact.
 - Environmental exposure controls : The product must not be discharge directly into drains or waterways without treatment.

**MATERIAL SAFETY DATA SHEET**

Page :3

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9 Physical and Chemical Properties

Appearance : Clear Liquid
Specific Gravity : 1.2g/cm³
PH Value : 1.2

10 Stability and Reactivity

Conditions to avoid : Stable under the recommended storage conditions. Cfr. Section 7 "Storage".
Bacterial degradation can occur if the Product is stored for an unusually long period or is stored under unsuitable conditions.

Materials to avoid : N/D
Hazardous decomposition products : N/D

11 Toxicological Information

On product : Low toxicity is indicated by available data.
Under normal industrial conditions, there is no indication that the product can be considered as a health risk.
Skin contact should be avoided to prevent possible long-term or short-term sensitisation.

12 Ecological Information

Ecotoxicity : The Product is soluble with water and as such could cover considerable distances if spilled into waterways. Even a small spillage will whiten the appearance of water. Water for sewage treatment, that has been contaminated.
with small quantities of the Product, will not affect biomass. High concentrations may be harmful to fish and micro organisms.

Mobility : Not established.
Persistence and degradability : There is only a slow environmental degradation of the Product.
Bioaccumulative potential : There is seemingly no tendency for bioaccumulation.
Other adverse effects : Unknown.

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Page :4

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13 Disposal Considerations

- The following advice only applies to the product as supplied.
- Combination with other materials may well indicate another route of disposal. If in doubt, contact local TLC-KOYA CHEMICALS MANUFACTURING SDN BHD or local authorities.
- Empty packaging should be taken for recycling, recovery or disposal through a suitably qualified or licensed contractor.
- Care should in any case be taken to ensure compliance with national and local regulations.
- This product is not suitable for disposal by either landfill or via municipal sewers, drains, and natural streams, rivers or seas, they will effect the relationship between living things, plants and their environment.

14 Transport Information

General information : This product is not regulated for road/rail & sea transport.

15 Regulatory Information

Classification and labeling : Classification / symbol - not regulated.
Governing directive : Occupational Safety and health (Classification, Packaging and Labeling of Hazardous Chemicals) Regulations 1997.
Safety advice : May contain information in excess of requirements under applicable laws.
R22 Harmful If swallowed.
R38 Irritating to skin
S2 Keep out of reach of children.

16 Other information

Further information : None
Print date : 18-6-2014

N/A - Not Applicable N/D - Not Determined

All recommendations for the use of our products, whether given by us in writing, orally, or to be implied from data or test results obtained by us, are based on the current state of our knowledge at the time such recommendations are made. When additional information is obtained, these recommendations may be updated. They may also be influenced by circumstances outside our control. Notwithstanding such recommendations, the user is responsible to determine that the product as supplied by us, is suitable for the process or purpose he intends to use it. The user of the product is solely for compliance with all laws and regulation applying to the use of the product. Since we cannot control the application, use or processing of the products, we do not accept responsibility therefore. The user shall ensure that the intended use of the products will not infringe in any party's intellectual property rights.

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