SAFETY DATA SHEET

Issue Date: November 1, 2004 Revision Date: February 4, 2010

IDENTIY

WASHING SOLUTION FOR TUBES

1. PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: WASHING SOLUTION FOR TUBES

MANUFACTURER: ARKRAY FACTORY, Inc.

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2. HAZARDS IDENTIFICATION

Name of division : Not applicable to the classification criteria.

Physical hazard : Incombustible, and not dangerous in common uses.

Human health hazard : No data available yet Environmental effects : No data available yet

3. COMPOSITION / INFORMATION ON INGREDIENTS

Material identification

Substrate/Mixture : Mixture

Composition and contents

1. Nonionic surfactant :1 to 5 %
2. Inorganic salt :1 to 5 %
3. Antiseptic :0.1 to 1 %
4. Pure water :85 to 95 %

4. FIRST-AID MEASURES

Eye Contact

If even a small amount of the product gets into eyes, immediately wash the affected eye by flushing a lot of water for 15 minutes or more. Get medical treatment by an oculist.

Skin Contact

Wash the affected area with a lot of cold water, get medical treatment by an oculist.

Inhalation

Cover the victim with, for example, a blanket and remove to fresh air. He should blow his nose and gargle. If he has trouble breathing, give oxygen quickly. Immediate medical treatment is required.

Ingestion

Rinse inside the mouth with water sufficiently.

Give a lot of water to induce vomiting.

Never force the affected person to vomit.

Immediately get medical treatment.

5. FIRE-FIGHTING MEASURES

Fire fighting procedure:

Being a nonflammable material, this protects container and nearby flammable items from burning.

In case of a fire around the containers containing the products:

Move the containers to a safe place. Try to extinguish the fire around the containers.

6. ACCIDENTAL RELEASE MEASURES

Individual protection: Use personal protective devices. Please refer to point 8 for specific protection measures.

Environmental precautions: Dispose in compliance to the law in force. Clean spillage area.

Cleaning methods: Rinse with running water.

7. HANDLING & STORAGE

- Wear proper personal protective device in order to avoid of the product with your eyes, skin, or clothes.
 - Never swallow the product by mistake.
 - After handling the product, wash your hands and face sufficiently.
 - Do not handle the container so violently that they are rolled over, dropped or get impact.
 - In the storage, tighten the stopper and avoid exposure to direct sunlight or hot materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limit: Not available

Eye Protection: Use safety goggles(glasses), if necessary.

Skin Protection: Use rubber gloves and suitable protective clothing, if necessary.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance: Colorless transparent solution

pH: 7.5 (±1.0) (Undiluted solution)
Boiling Point: Not available
Melting Point: Not available
Vapor Pressure: Not available

Solubility: Dissolvable in water and hot water

Flash Point: No flashing property

Autoignition Temperature: Not available

Flammable Limits: Not available

Odor: Almost none

Specific gravity: 1.00~1.10

Stability: Stable under the normal storage condition

Reactivity: None

10. STABILITY AND REACTIVITY

Condition to avoid: Sunlight, heat and humidity

Stability and Reactivity: Stable under normal conditions

Materials To Avoid: Not available

Hazardous Decomposition Products: Not available

11. TOXICOLOGICAL INFORMATION

Irritating property(Skin&Eye): Almost none
Sensitizing effect: No data available yet
Acute toxicity: No data available yet
Mutagenicity: No data available yet
Sub-acute toxicity: No data available yet
Carcinogenic effects: No data available yet

Carcinogenicity: IARC; Not listed, NTP; Not listed, OSHA; Not listed, ACGUH; Not listed

Reproductive Toxicity: Not available as the mixture

Others: No data available yet

12. ECOLOGICAL INFORMATION

Ecotoxicity : hr LC₅₀: Not available **Mobility:** Not available

Persistence and degradability: Not available Bioaccumulative potential: Not available

Other adverse effect: Not available

13. DISPOSAL CONSIDERATION

Dilute the waste product with a large amount of water and dispose of it.

Flush with a lot of water in accordance with all applicable regulations. Any disposal practice must be in complicated with company, local, state, and federal laws and regulations. (Contact country, local or state environmental agency for specific rules.)

14. TRANSPORT INFORMATION

In transporting the product, check to see that no leakage from the container occurs.Load the containers so that they may not topple over, fall down, or be damaged,and take measures against collapse of the pile of the containers.

IATA: Not restricted as the mixture.

15. REGULATORY INFORMATION

This product is not classified as a dangerous preparation according to 1999/45/EC and 67/548/EEC and

2001/58/EC.

Law Concerning the Examination and Regulation of Manufacture, etc. of Chemical Substances Specified chemical substances: Not applicable

Designated chemical substances: Not applicable

Industrial Safety and Health Law, Clause 52, item 2, Substance to be informed: Not applicable PRTR Law: Not applicable

Poisonous and Deleterious Substances Control Law:

Poisonous substances: Not applicable

Deleterious substances: Not applicable

Dangerous Substances Shipping and Storage Rules:

Dangerous substances: Not applicable

Fire service law:

Dangerous substances: Not applicable

Law relating to the Prevention of Marine Pollution and Marine Disaster:

Dangerous substances: Not applicable

Law for the Prevention of Marine Pollution

Marine Pollution substances: Not applicable

16. OTHER INFORMATION

References, etc.

Guideline for preparation of Material Safety Data Sheet (Japan Chemical Industry Association)

Safety chemical substances data book (Ohm Corporation)

Laws and Regulations on Poisonous and Deleterious Substances Control (Yakumukoho Co., Ltd.),

Laws and regulations relating to Fire Service

MODIFICATION LIST

November 1, 2004 : Prepared

November 1, 2005 : Revised "Company information"

Change from Manufacturer "ARKRAY, Inc" to "ARKRAY FACTORY"

January.8, 2010 : Revised "Company information"

Change Telephone number & Facsimile number of the Manufacturer

February 4, 2010 : Revised a format in accordance with ISO11014-1

The information contained herein is based on the data available to us and is believed to be correct. However, ARKRAY, Inc. bears no warranty, expresses or implies regarding the accuracy of these data or the results to be obtained from the use thereof.

ARKRAY, Inc. assumes no responsibility for injury caused from the use of the product described herein.