

Washing solution 4.5 %

Date 6.11.2007

Previous date: 29.8.2007

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**1.1 Identification of the article****1.1.1 Commercial Product Name**

Washing solution 4.5 %

1.1.2 Product code

980929,984030

1.2 Use of the Substance/Preparation**1.2.1 Expressed in writing**

For general laboratory purposes. Washing solution for the clinical chemistry analyzer.

1.3 Identification of the substance/preparation and the company/undertaking**1.3.1 Supplier**

Thermo Fisher Scientific Oy, Clinical Diagnostics Finland

1.3.2 Contact information:

Ratastie 2, P.O.Box 100
 FI-01621 Vantaa
 FINLAND
 +358-9-329 100
 +358-9-3291 0300
 FI09215470

2. HAZARDS IDENTIFICATION

Irritating to eyes, respiratory system and skin. Contact with acids liberates toxic gas.

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Hazardous components**

3.1.1 CAS/EINECS and reg. number	3.1.2 Chemical name of the substance	3.1.3 Concentration	3.1.4 Classification
1310-73-2	Sodium hydroxide	1 %	C; R35 Corrosive
7681-52-9	sodium hypochlorite solution ... % Cl active	4.5 %	R31;C; R34 Corrosive

3.1.7 Further information

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4. FIRST AID MEASURES**4.2 Inhalation**

Move to fresh air in case of accidental inhalation of vapours or decomposition products. Consult a physician if necessary.

4.3 Skin contact

Wash off with plenty of water.

4.4 Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

4.5 Ingestion

Clean mouth with water and drink afterwards plenty of water. Call a physician immediately.

4.6 Information to doctor or other trained persons giving first aid

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5. FIRE-FIGHTING MEASURES

- 5.1 Suitable extinguishing media**
Carbon dioxide (CO₂), foam, water.
- 5.3 Specific hazards**
Burning produces obnoxious and toxic fumes.
- 5.5 Specific methods**
The product itself does not burn. Products released in case of fire causes corrosion to metals.

6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions**
Ensure adequate ventilation.
- 6.2 Environmental precautions**
-
- 6.3 Methods for cleaning up**
Flush with water. Soak up with inert absorbent material.

7. HANDLING AND STORAGE

- 7.1 Handling**
Avoid contact with skin and eyes.
- 7.2 Storage**
Keep container tightly closed. Protect from light.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure Limit Values**
- 8.1.1 Threshold limits**
1310-73-2 sodium hydroxide 2 mg/m³ (8 h)
- 8.2 Exposure controls**
- 8.2.1 Occupational exposure controls**
Avoid contact with skin, eyes and clothing.
- 8.2.1.1 Respiratory protection**
-
- 8.2.1.2 Hand protection**
Protective gloves.
- 8.2.1.3 Eye protection**
Safety glasses.
- 8.2.1.4 Skin and body protection**
Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 General Information (appearance, odour)**
Colourless, aqueous solution, slight chlorine.
- 9.2 Important Health Safety and Environmental Information**
- 9.2.1 pH** alkaline, 13
- 9.2.2 Boiling point/range** -
- 9.2.3 Flash point** does not flash
- 9.2.4 Flammability (solid, gas)** does not ignite

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9.2.5	Explosive properties	
9.2.5.1	Lower explosion limit	-
9.2.5.2	Upper explosion limit	-
9.2.7	Vapour pressure	-
9.2.8	Relative density	-
9.2.9	Solubility	
9.2.9.1	Water solubility	completely soluble
9.2.9.2	Fat solubility (solvent - oil to be specified)	-
9.2.10	Partition coefficient (n-octanol/water)	-

10. STABILITY AND REACTIVITY

- 10.1 Conditions to avoid**
Decomposes on exposure to light. Do not mix with acids.
- 10.2 Materials to avoid**
Light metals.
- 10.3 Hazardous decomposition products**
Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL INFORMATION

- 11.1 Acute toxicity**
Sodium hypochlorite:
LD50/oral/mouse = 5800 mg/kg
- 11.2 Primary irritation**
Irritating to eyes, respiratory system and skin.
- 11.3 Sensitisation**
May cause sensitisation by skin contact.
- 11.5 Human experience**
-

12. ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity**
- 12.1.1 Aquatic toxicity**
Sodium hydroxide:
LC50/48h/daphnia = 30-100 mg/l
Sodium hypochlorite:
LC50/96h/Sheephead minnows = 5.9 mg/l, LC50/96h/rainbow trout = 0.07 mg/l (Cl2)
- 12.1.2 Toxicity to other organisms**
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- 12.2 Mobility**
Highly soluble in water.
- 12.3 Persistence and degradability**
- 12.3.1 Biodegradation**
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- 12.3.2 Chemical degradation**
Sodium hypochlorite decomposes to either salt and oxygen or sodium chlorate and salt.
- 12.4 Bioaccumulative potential**
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13. DISPOSAL CONSIDERATIONS

The product has to be disposed of as laboratory chemical in accordance with local regulations.

14. TRANSPORT INFORMATION

14.2	Packaging group	-
14.3	Land transport	
14.3.1	Class	-
14.3.2	Risk No.	-
14.3.3	Description of the goods	-
14.4	Sea transport	
14.4.1	IMDG	-
14.4.2	Proper shipping name	-
14.5	Air transport	
14.5.1	ICAO/IATA	-
14.5.2	Proper shipping name	-

15. REGULATORY INFORMATION

15.1	Information on the warning label	
15.1.1	Letter code of the warning symbol and indications of danger for the preparation	
	Xi	Irritant
15.1.2	Names of the ingredients given on the warning label	
	Sodium hydroxide	
15.1.3	R-phrases(s)	
	R36/38	Irritating to eyes and skin.
15.1.4	S-phrases(s)	
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S28b	After contact with skin, wash immediately with plenty of water.
	S50	Do not mix with [acids].
15.1.5	Special regulations on certain preparations	
	-	
15.2	National regulatory information:	
	-	

16. OTHER INFORMATION

16.1	Full text of R-phrases referred to under sections 2 and 3	
	R36/38	Irritating to eyes and skin.
	R31	Contact with acids liberates toxic gas.
	R34	Causes burns.
	R35	Causes severe burns.
16.4	Additional information available from:	
	Code of the Material Safety Data Sheet: D01981-05-05-MSDS-Washing solution 4.5 %-EN	
	Corporation mentioned in point 1.3.	
	The information in this datasheet is to our best knowledge correct and complete, and is offered in good faith as accurate. It characterizes the product with regard to the appropriate safety precautions. It does not guarantee properties of the product.	
16.5	Literary reference	
	This product has been evaluated in accordance with the directives 1967/548/EEC, 199/45/EC and 2001/58/EC.	

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16.6 Additions, Deletions, Revisions
Changes in the sections 1.2 and 16.

6.11.2007

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