SECTION 1: Identification of the substance/preparation and company

1.1 Product identifier

Sera Wash M-VFN

1.2 Relevant Identified uses of the substance or mixture and uses advised against

Use pattern:
Textile auxiliary

1.3 Details of the supplier of the safety data sheet

DyStar Colours Distribution GmbH
Am Prime Park 10-12
D - 65479 Raunheim
Telephone no. 49(0)61424072 - 3172
Telefax no. 49(0)61424072 - 3000
MSDS@DyStar.com

1.4 Emergency telephone number

Emergency telephone number: 49(0)2365/4984140

SECTION 2: Hazards identification

2.1 Classification of the Substance or Mixture

According to regulation (EC) 1272/2008 on classification, labelling and packaging of substances and mixtures

Harmful if swallowed.
Causes skin irritation.
Causes serious eye damage.
Classification of the Substance or Mixture

Acute Toxicity: Cat. 4 (oral)
Skin corrosion/irritation: Irritant, Cat. 2
Serious eye damage/eye irritation: Irreversible effects on the eye, Cat. 1

Possible Hazards according Directive 67/548/EEC or 1999/45/EC

Harmful if swallowed.
Irritating to skin.
Risk of serious damage to eyes.

2.2 Label elements

Pictograms:

- Corrosion
- Exclamation mark

Signal word:
Danger

Hazard Statements:
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary Statements (Prevention):
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements (Response):
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
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 or a doctor/physician.
P362 Take off contaminated clothing and wash before reuse.
Precautionary Statements (Disposal):
P501 Dispose of contents/container to waste treatment in accordance with national regulations.

2.3 Other hazards

If applicable in this section are given hazards which are not part of the overall classification but can contribute to the hazards which may be associated with the substance or mixture.

not applicable

SECTION 3: Composition/information on ingredients

3.1 Substances
Not applicable

3.2 Mixtures

Chemical characterization
Ethoxylated fatty amine

Hazardous Ingredients (GHS) according Regulation (EC) 1272/2008

2-methyl-2,4-pentanediol
Content: 5 - 10 %  Skin Irit. 2  H315
EC Number: 203-489-0  Eye Irit. 2  H319
EC index no.: 603-053-00-3
CAS number: 107-41-5

fatty amine ethoxylate
Content: 30 - 40 %  Acute Tox. 4 (oral)  H302
CAS number: 26635-93-8  Skin Irit. 2  H315
Eye Dam. 1  H318

Hazardous Ingredients according Directive 1999/45/EC

2-methyl-2,4-pentanediol
Content: 5 - 10 %  Hazard symbols: Xi
EC Number: 203-489-0  R phrases: 36/38
EC index no.: 603-053-00-3
CAS number: 107-41-5

fatty amine ethoxylate
Content: 30 - 40 %  Hazard symbols: Xn
CAS number: 26635-93-8  R phrases: 22 - 38 - 41

SECTION 4: First aid measures
4.1 Description of first aid measures

General information: Change soaked clothing. Avoid contact with the concentrated product.

After inhalation: If the patient feels unwell, seek medical advice.

After contact with skin: After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes: In case of eye contact rinse with plenty of water. Consult an eye specialist.

After ingestion: Consult a doctor. Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Please see hazard statements in section 2.2 if given and information in this section if stated.

4.3 Indication of any immediate medical attention and special treatment needed

Please see precautionary statements in section 2.2 as well as first aid information in this section if stated.

Treatment: Show the physician the safety data sheet.

Treatment: Show the physician the safety data sheet.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Adapt extinguishing measures to the conditions surrounding the fire., carbon dioxide, foam, dry powder, sprayed water jet

Extinguishing media that must not be used for safety reasons: water jet

5.2 Special hazards arising from the substance or mixture

not determined

5.3 Advice for firefighters

Special protective equipment for firefighting: Fire brigade protection clothes. Use self-contained breathing apparatus.

Further information: According to fire conditions the formation of health damaging materials cannot be excluded.

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: When handling observe the usual precautionary measures for chemicals. Provide good ventilation.

6.2 Environmental precautions

Environmental precautions: Contamination of environment should be avoided. Prevent entry into drains, waters or soil. Do not let it get into surface water/ground water. Capture contaminated water and dispose.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up/taking up: Prevent spread over a wide area (e.g. by containment or oil barriers). Dispose contaminated material as waste according to chapter 13. Sample with liquid binding materials (e.g. sand, diatomaceous earth) and collect in container.

6.4 Reference to other sections

Additional information: not necessary

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: Wear recommended protective equipment. Pay attention to safety rules. Pay attention to warning labels on the barrels.

Advice on protection against fire and explosion: not necessary

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels: Requirements on the storage quality according to WGK: 2

Further information on storage conditions: Keep container tightly closed. Recommended storage temperature: +3 °C to +35 °C Provide good ventilation.

Storage stability: not determined

7.3 Specific end use(s)

not determined

SECTION 8: Exposure controls/personal protection
8.1 Specific end use(s)

Additional advice on system design: De-aeration and cleaning of exhaust air should be provided.

Ingredients with occupational exposure limits to be monitored contains: **2-methyl-2,4-pentanediol**

MAK value : 10 ppm 49 mg/m3

most tolerable limit category I
Pregnancy Group D

8.2 Exposure controls

General protective measures: Avoid contact with eyes and skin. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and at end of work and use skin-protecting ointment. When using do not eat, drink or smoke. We recommend the following protective equipment:

- **Respiratory protection**: Provide good ventilation.
- **Hand protection**: Wear suitable gloves e.g. of nitrile rubber (observe permeation time) In the event of contamination, change protective gloves immediately. Avoid skin contact with the wetted surfaces of the protective gloves.
- **Eye protection**: tightly fitting safety glasses
- **Body protection**: Working clothes

### SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>mild</td>
</tr>
<tr>
<td>Melting range</td>
<td>&lt; 10 °C</td>
</tr>
<tr>
<td>Boiling range</td>
<td>approx. 100 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100 °C</td>
</tr>
</tbody>
</table>
Safety data sheet
in accordance with regulation (EC) No 1907/2006  (EC No 453/2010)

Sera Wash M-VFN
000010025464
Version 2.2 / D / EN Revision Date: 03.12.2014
replaces version: 2.1 on 19.08.2013
generated on: 19.02.2008

Ignition temperature : > 100 °C
self ignition : not self-igniting
flammability : not determined
Vapour pressure : 23 hPa (20 °C)
Density : approx. 1,0 g/cm3 (20 °C)
Method : DIN 51757
Solubility in water : 100 g/l (20 °C)
clear
pH value : 7,5 - 9,5 (20 °C)
undiluted
Octanol/water partition coefficient (log Pow) : not determined
Viscosity : approx. 150 mPa.s (20 °C)
Method : DIN 53015
Viscosity (kinematic) : not determined
Viscosity (flow time) : not determined

9.2 Other information
Combustion number : not determined
Dust explosion class : not determined
Bulk density : not determined
Further information (phys.-chem.) not necessary

SECTION 10: Stability and reactivity

10.1 Reactivity
No hazardous reactions when stored and handled according to prescribed instructions.

10.2 Chemical stability
Thermal decomposition No thermal decomposition when stored and handled correctly.

10.3 Possibility of hazardous reactions
Hazardous reactions: No hazardous reaction when used as directed.

Hazardous decomposition products: Not applicable

**10.4 Conditions to avoid**

For avoidable conditions: not necessary

**10.5 Incompatible materials**

For avoidable materials: not necessary

**10.6 Hazardous decomposition products**

Not applicable

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**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Acute oral toxicity : LD50 > 2.000 mg/kg

Irritant effect on skin : irritant

Irritant effect on eyes : Risk of serious damage to eyes.

Sensitization : not determined

Repeated dose toxicity : not determined

Mutagenicity : not determined

Teratogenicity : not necessary

Carcinogenicity : not necessary

Remarks : The product is not harmful to health when handled appropriately and used as prescribed, according to our experience and knowledge. The use of the product in industry up to now has not shown any negative physiological effects on the personal. No known sensitizing effect.

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**SECTION 12: Ecological information**

**12.1 Toxicity**

Fish toxicity : LC50 > 10 mg/l (Leuciscus idus)

Method : OECD 203
Daphnia toxicity : EC50 18 mg/l (Daphnia magna)
Method : OECD 202

Algae toxicity : not determined

Bacteria toxicity : not determined

12.2 Persistence and degradability

Physico-chemical eliminability : not determined

Biodegradability : > 80 %
Readily eliminable from water
Method : OECD 302 B
COD decrease, If regulations are followed when introducing effluent into biological waste water treatment plants, no adverse effect on the degradation activity of activated sludge is to be expected., The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents., Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Dissolved Organic carbon (DOC) : not determined

Chemical oxygen demand (COD) : 992 mg/g

Biochemical oxygen demand (BOD5): 42 mg/g

Remarks: The product does not contain heavy metals in concentrations of concern for waste water.
Product does not add to the AOX-value of the sewage. (DIN EN 1485)
The product should not be allowed to reach either ground or open waters.
Self-commitment of TEGEWA on the classification of textile chemicals in accordance to their relevance to waste-water : ARS I : Less relevant to waste-water

12.3 Bioaccumulative potential
not determined

12.4 Mobility in soil
not determined

12.5 Results of PBT and vPvB assessment
not determined

12.6 Other adverse effects
not determined

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: May be disposed of according to the local regulations (systematic dump or burning).

Uncleaned packaging: Empty totally and clean. Water with addition of cleaning media.

SECTION 14: Transport information

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td>Non dangerous goods</td>
</tr>
<tr>
<td>ADNR</td>
<td>Non dangerous goods</td>
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<td>RID</td>
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<td>IMDG</td>
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<td>IATA_C</td>
<td>Non dangerous goods</td>
</tr>
<tr>
<td>IATA_P</td>
<td>Non dangerous goods</td>
</tr>
</tbody>
</table>

14.1 UN number
See above entry at the respective regulation.

14.2 UN proper shipping name
See above entry at the respective regulation.

14.3 Transport hazard class(es)
See above entry at the respective regulation.

14.4 Packing group
See above entry at the respective regulation.

14.5 Environmental hazards
See above entry at the respective regulation.

14.6 Special precautions for user
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No transport in bulk according to Annex II of MARPOL 73/78 and the IBC code foreseen for this substance or mixture.

SECTION 15: Regulatory information

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

Labelling according Directive 67/548/EEC or 1999/45/EC:

Hazard symbols: Xn Harmful
contains: fatty amine ethoxylate

R22 : Harmful if swallowed.
R38 : Irritating to skin.
R41 : Risk of serious damage to eyes.

S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 : After contact with skin, wash immediately with plenty of water.
S37/39 : Wear suitable gloves and eye/face protection.

15.2 Chemical safety assessment

not determined

SECTION 16: Other information

This data sheet has to be accessible to the technical staff all the time.

Text of all shortcuts referred to in sections 2 and 3:

Xi Irritant
Xn Harmful
22 Harmful if swallowed.
38 Irritating to skin.
41 Risk of serious damage to eyes.
36/38 Irritating to eyes and skin.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
Acute Tox. 4 (oral) Acute Toxicity: Cat. 4 (oral)
Eye Dam. 1 Serious eye damage/eye irritation: Irreversible effects on the eye, Cat. 1
Eye Irrit. 2 Serious eye damage/eye irritation: Irritating to eyes, Cat. 2
Skin Irrit. 2 Skin corrosion/irritation: Irritant, Cat. 2

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.