SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or mixture:
Product name : AZURA TE CLEAN-OUT
MSDS Number : 000001014193

1.2 Use of the substance/mixture:
Use of the Substance/Preparation : Offset plate finisher solution
Business group : GS

1.3 Company/undertaking identification
Agfa Corporation
611 River Drive
Center 3
Elmwood Park, NJ 07407
U.S.A.

Transport Emergency : Non-transportation
Call CHEMTREC : +1 800 4249300
International : +1 703 5273887
Health Emergency Phone : +1 303 6235716
Agfa Information Phone : +1 201 4402500

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

<table>
<thead>
<tr>
<th>GHS (Globally Harmonized System of Classification and Labelling of Chemicals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard classes</td>
</tr>
<tr>
<td>Hazard categories</td>
</tr>
<tr>
<td>Hazard statements</td>
</tr>
</tbody>
</table>

2.2 Label elements:
Hazardous components which must be listed on the label :

Symbol(s)

Signal word : DANGER
Hazard : H318 Causes serious eye damage.
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Revision Date 09-14-2015

Precautionary statements:
prevention : P280  Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements:
response : P305+P351+P 338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing.
P310  Immediately call a POISON CENTER/doctor/…

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture related information:
Aqueous offset plate finisher solution, mainly consisting of:

3.2 Hazard ingredients:
The hazard and labelling information in this section is that of the individual ingredients. The corresponding information relative to this product as supplied is given in section 2.1.

Hazardous components

- sodium salts of sulfonated 1,1'-oxybisbenzene
  Concentration [%] : 1.0 - 5.0
tetrapropylene derivative
  CAS-No. : 119345-04-9
  Hazard classes : Serious eye damage, Chronic hazards to the aquatic environment
  Hazard categories : Category 1, Category 2
  Hazard statements : H318, H411

- Citric acid
  Concentration [%] : 1.0 - 5.0
  CAS-No. : 77-92-9
  Hazard classes : Serious eye irritation
  Hazard categories : Category 2
  Hazard statements : H319

Components with a community workplace exposure limit
This product does not contain components with a community exposure limit.

3.3 Remark:
Full text of each relevant H-phrase is listed in section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:
Eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin contact : Wash immediately with plenty of water and soap. If symptoms persist, seek medical advice.
Ingestion : Rinse mouth with plenty of water. Seek medical advice.
Inhalation : Take person to fresh air. If necessary, seek medical advice.

4.2 Most important symptoms and effects:
Symptoms : In normal conditions of use, no adverse effects are expected.

4.3 Indication of immediate medical attention and special treatment needed:
General advice : Call a physician immediately.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing media : All extinguishing media are suitable. Carbon dioxide (CO2), Alcohol-resistant foam, Dry extinguishing powder., Powder form.

5.2 Special hazards arising from the substance or mixture:
Specific hazards during fire fighting : Do not use a solid water stream as it may scatter and spread fire.
Further information : Product is not combustible.

5.3 Advice for fire-fighters:
Special protective equipment for fire-fighters : Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.
Special protective equipment for fire-fighters : Regular fire intervention clothes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Personal precautions : See section : Exposure controls / personel protection. Cleanup personnel must use appropriate personal protective equipment.
Additional advice : Wash away residues with plenty of water. Observe normal precautions when handling chemicals.

6.2 Environmental precautions:
Environmental precautions : For waste disposal see section 13. The product should not be allowed to enter drains, water courses or the soil.

6.3 Methods and material for containment and cleaning up:
Methods for cleaning up : Dike the spill if necessary. Soak up with absorbent material. Collect
large spills into a properly labelled and sealable container. Prevent release into the drain, soil or surface water.

6.4 Reference to other sections:
For waste disposal see section 13.
For personal protection see section 8.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:
Advice on safe handling: Prevent product from diffusing.
Hygiene measures: Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

7.2 Conditions for safe storage:
Requirements for storage areas and containers: Keep container tightly closed. Protect from direct sunlight.
Advice on common storage: Store away from strong alkalis.

7.3 Specific end use:
This substance is used only by trained professionals under restricted conditions.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:
8.1.1 Components with occupational exposure limits rsp. biological occupational exposure limits requiring monitoring:
8.1.1.1 Occupational exposure limits:
Air limit values (US)
We are not aware of any national exposure limit.
Air limit values (CA)
We are not aware of any national exposure limit.

Biological limit values (US)
We are not aware of any national exposure limit.

Biological limit values (CA)
We are not aware of any national exposure limit.

8.1.1.2 Additional exposure limits under the conditions of use:
No other exposure limits applicable.

8.2 Exposure controls:

Occupational exposure controls:

➢ **Instruction measures to prevent exposure:**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Keep away from foodstuffs, drinks and tobacco.

➢ **Technical measures to prevent exposure:**

Ensure adequate ventilation.

➢ **Personal measures to prevent exposure:**

- **Respiratory protection:** Under normal conditions of use, respirator protection is not required. If respirators are used, institute a program in accordance with OSHA standard 29CFR1910.134 or Canada CSA Standard Z94.4-02. Not required under normal use.

- **Hand protection:** Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butylrubber (thickness >= 0.70 mm, breakthrough time > 480 min), (EN 374). The use of protective gloves should conform to the specifications of EC directive 89/686/EC and the resultant standard EN374.

Additional advice: The data are based on own tests, literature data and information of glove manufacturers or derived from similar substances. Because several factors may influence these properties (eg temperature), one should take into account the fact that the life of a chemical gloves in practice may be considerably shorter than indicated by the permeation test. The high diversity of types of use are prescribed by the manufacturer.

- **Eye protection:** Safety glasses.

- **Body Protection:** Safety clothes: long sleeved clothing EN13688.

- **Personal protective equipment:** Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties:

9.1.1 Appearance:

- **State of matter:** Liquid.
- **Form:** Liquid.
- **Color:** Light yellow.
- **Odor:** Nearly odourless.
9.1.2 Important health, safety and environmental information:

- **pH (25 °C)**: 3.6
- **Melting point/range**: < 0 °C
- **Boiling point/range**: > 100 °C
- **Flash point**: > 93.33 °C
  - Not combustible.
- **Vapour pressure (20 °C)**: 23.00 hPa
- **Relative density (20 °C)**: 1.073
- **Solubility/qualitative**: Miscible with water at all ratios.
- **Water solubility**: completely soluble
- **Partition coefficient (n-octanol/water)**: No data available
- **Viscosity, dynamic**: No data available
- **Viscosity, kinematic**: No data available
- **Lower explosion limit**: No data available
- **Upper explosion limit**: No data available
- **Evaporation rate**: Almost no evaporation (20°C).
- **Flammability (solid, gas)**: not auto-flammable

9.2 Other information:

- **VOC content**: 0.0 g/l
  - VOC content excluding water

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

- **Reactivity**: Reactivity is not to be expected under normal conditions of temperature and pressure.

10.2 Chemical stability:

- **Stability**: The product is stable under normal conditions of storage and use.

10.3 Possibility of hazardous reactions:

- **Hazardous reactions**: The product is stable under normal conditions of storage and use.

10.4 Conditions to avoid:

- **Conditions to avoid**: Avoid contact with strong alkalis.

10.5 Materials to avoid:

- **Materials to avoid**: Store away from strong alkalis.

10.6 Hazardous decomposition products:

- **Hazardous decomposition**: None
SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicity data specific for individual ingredients in their pure state:

Toxicokinetics, metabolism and distribution:

- Citric acid
  
  No data available

Acute effects (toxicity tests):

- **Acute Toxicity**
  
  - Citric acid

<table>
<thead>
<tr>
<th>Effect dose</th>
<th>Species</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute oral toxicity</td>
<td>LD50</td>
<td>rat</td>
<td>3,000 mg/kg</td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>LD50</td>
<td>rabbit</td>
<td>5,500 mg/kg</td>
</tr>
<tr>
<td>Acute inhalation toxicity</td>
<td></td>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT):

<table>
<thead>
<tr>
<th>Specific effects</th>
<th>Affected organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

Irritant and corrosive effects:

- Citric acid

<table>
<thead>
<tr>
<th>Exposure time</th>
<th>Species</th>
<th>Evaluation</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary irritation to the skin</td>
<td>rabbit</td>
<td>No skin irritation</td>
<td>OECD Test Guideline 404</td>
</tr>
<tr>
<td>Irritation to eyes</td>
<td>Based on available data, the classification criteria are not met.</td>
<td>Irritating to eyes.</td>
<td>Literature.</td>
</tr>
</tbody>
</table>

Irritation to the respiratory tract:

No data available
Sensitisation:

- Citric acid

<table>
<thead>
<tr>
<th>Species</th>
<th>Evaluation</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

Aspiration hazard:
No data available

Sub-acute, sub-chronic and chronic toxicity

Repeated dose toxicity:
No data available

Specific target organ toxicity (STOT):
No information available.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

- Carcinogenicity
  No data available
- Mutagenicity
  No data available
- Genetic toxicity in vitro
  No data available
- Genetic toxicity in vivo
  No data available
- Teratogenicity
  No data available
- Toxicity to reproduction
  No data available

Summarised evaluation of the CMR properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Teratogenicity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

SAFETY DATA SHEET

AZURA TE CLEAN-OUT

SUBID:000001014193

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Revision Date 09-14-2015
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Version 1
Print Date 03-25-2016
Revision Date 09-14-2015

Toxicity to reproduction : No data available

Experiences made in practice:

- Citric acid
  Causes serious eye irritation.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

- Citric acid

<table>
<thead>
<tr>
<th>Effect</th>
<th>Exposure</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
<td>LC50</td>
<td>Leuciscus idus (golden orfe)</td>
<td>760 mg/l</td>
</tr>
<tr>
<td>Toxicity to daphnia</td>
<td>EC50</td>
<td>Daphnia magna (water flea)</td>
<td>120 mg/l</td>
</tr>
<tr>
<td>Toxicity to algae</td>
<td>EC5</td>
<td>Scenedesmus quadricauda (algae)</td>
<td>640 mg/l</td>
</tr>
<tr>
<td>Toxicity to bacteria</td>
<td>EC5</td>
<td>Pseudomonas putida (bacteria)</td>
<td>&gt; 10,000 mg/l</td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability:

Physico-chemical removability
Neutralization is normally necessary before waste water is discharged into water treatment plants.

Chemical Oxygen Demand (COD)

<table>
<thead>
<tr>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>145,000 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

Adsorbed organic bound halogens (AOX)

- sodium salts of sulfonated 1,1'-oxybisbenzene tetrapropylene derivative
- Citric acid
  Product does not contain any organic halogens.

Biodegradation
• sodium salts of sulfonated 1,1’-oxybisbenzene tetrapropylene derivative

• Citric acid

<table>
<thead>
<tr>
<th>Value</th>
<th>Exposure time</th>
<th>Method</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>98 %</td>
<td>2 d</td>
<td>Literature</td>
<td>Readily biodegradable. According to the results of tests of biodegradability this product is considered as being readily biodegradable.</td>
</tr>
</tbody>
</table>

Biochemical Oxygen Demand (BOD)

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Incubation time</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>19,500 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

12.3 Bioaccumulative potential:

Partition coefficient (n-octanol/water)
No data available

Bioconcentration factor (BCF)

• sodium salts of sulfonated 1,1’-oxybisbenzene tetrapropylene derivative

• Citric acid
Accumulation in aquatic organisms is unlikely.

12.4 Mobility in soil:
Soluble in water.

Henry's constant

• Citric acid

<table>
<thead>
<tr>
<th>Value</th>
<th>Temperature</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No information available.</td>
</tr>
</tbody>
</table>

Transport between environmental compartments
Transport between environmental compartments can be expected.

12.5 Results of PBT and vPvB assessment:
This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)

12.6 Other adverse effects:
No information on ecology is available.
SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods
Waste disposal should be in accordance with existing federal, state and local environmental control laws. Discharge to sewer may require approval of permitting authority and may require pretreatment.

Empty containers.
Recondition or dispose of empty container in accordance with governmental regulations.

US. RCRA Hazardous Waste Classification (40 CFR 261)
If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

SECTION 14. TRANSPORT INFORMATION

Not regulated according to IMO/IMDG.
Not regulated according to ICAO/IATA aircraft only.
Not regulated according to ICAO/IATA passenger and cargo aircraft.
Not Regulated according to US Department of Transportation (DOT) 49 CFR
Not regulated according to Transport of Dangerous Goods (TDG)

SECTION 15. REGULATORY INFORMATION

US. Toxic Substances Control Act (TSCA)
All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substance Control Act (U.S, EPA TSCA) inventory.

US. OSHA Classification
This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

US. SARA 311/312 Hazard Categories
Acute Health Hazard.

US. California Prop. 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other harm.

State Right-to-Know Information
The following chemicals are specifically listed by individual states. Other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

**US. Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)**

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10124-56-8</td>
<td>&gt;= 1.0 - &lt;= 5.0</td>
</tr>
</tbody>
</table>

**US. New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)**

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10124-56-8</td>
<td>&gt;= 1.0 - &lt;= 5.0</td>
</tr>
</tbody>
</table>

**US. Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)**

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>10124-56-8</td>
<td>&gt;= 1.0 - &lt;= 5.0</td>
</tr>
</tbody>
</table>

**US. Massachusetts, New Jersey, Pennsylvania or Rhode Island Right to Know Substance Lists:**

See Section 2.

**Canadian WHMIS Classification**

E : Corrosive Material

**Canadian Environmental Protection Act (CEPA)**

All components of this product are on the Canadian DSL list.

**SECTION 16. OTHER INFORMATION**

Text of H-phrases referred to under headings 2 and 3:

- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H411 Toxic to aquatic life with long lasting effects.

This MSDS is replacing Agfa MSDS number 1863G

This information is furnished without warranty, expressed or implied, and is believed to be accurate to the best knowledge of Agfa Corporation. The data on this SDS relates only to the specific material designated herein. Agfa Corporation assumes no legal responsibility for use or reliance upon these data. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.