SAFETY DATA SHEET


G5200c

SUBID:000001007354

Version 5

Revision Date 04-07-2015

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

1.1 Identification of the substance or mixture:
Product name : G5200c
MSDS Number : 000001007354

1.2 Use of the substance/mixture:
Use of the Substance/Preparation : Activator concentrate

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

Transport Emergency Call CHEMTREC : +1 800 4249300
Non-transportation Health Emergency Phone : +1 303 6235716
International : +1 703 5273887 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>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hazard classes</td>
<td>Acute toxicity</td>
</tr>
<tr>
<td>Hazard categories</td>
<td>Category 4</td>
</tr>
<tr>
<td>Hazard statements</td>
<td>H302</td>
</tr>
<tr>
<td>• Hazard classes</td>
<td>Serious eye damage</td>
</tr>
<tr>
<td>Hazard categories</td>
<td>Category 1</td>
</tr>
<tr>
<td>Hazard statements</td>
<td>H314</td>
</tr>
<tr>
<td>• Hazard classes</td>
<td>Skin corrosion</td>
</tr>
<tr>
<td>Hazard categories</td>
<td>Category 1A</td>
</tr>
<tr>
<td>Hazard statements</td>
<td>H314</td>
</tr>
<tr>
<td>• Hazard classes</td>
<td>Skin sensitizer</td>
</tr>
<tr>
<td>Hazard categories</td>
<td>Category 1</td>
</tr>
<tr>
<td>Hazard statements</td>
<td>H317</td>
</tr>
<tr>
<td>• Hazard classes</td>
<td>Corrosive to metals.</td>
</tr>
<tr>
<td>Hazard categories</td>
<td>Category 1</td>
</tr>
<tr>
<td>Hazard statements</td>
<td>H290</td>
</tr>
</tbody>
</table>
2.2 Label elements:

Hazardous components which must be listed on the label:

Symbol(s)

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GHS05</td>
<td></td>
</tr>
<tr>
<td>GHS07</td>
<td></td>
</tr>
</tbody>
</table>

Signal word: DANGER

Hazard statements:
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H290 May be corrosive to metals.

Precautionary statements:
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P270 Wash ... thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P274 Keep only in original container.

Precautionary statements: prevention
- P261: Avoid breathing vapors.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P290 Do NOT induce vomiting.

Precautionary statements: response
- P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/# if you feel unwell.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P321 Specific treatment (see ... on this label).
- P351 Remove/Take off immediately all contaminated clothing.
- P363 Wash contaminated clothing before reuse.
- P302+P352 IF ON SKIN: Wash with plenty of water/#
- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
- P390 Absorb spillage to prevent material damage.
- P405 Store locked up.
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PRECAUTIONARY STATEMENTS:

storage
P406 Store in a corrosive resistant/... container with a resistant inner liner.

Precautionary statements:
P501NA Dispose of contents / container to an approved waste disposal facility.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixture related information:
Aqueous activator concentrate, 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

- Potassium hydroxide
  Concentration [%] : 5.0 - 10.0
  CAS-No. : 1310-58-3
  Hazard classes : Acute toxicity Oral, Skin corrosion, Serious eye damage, Corrosive to metals.
  Hazard categories : Category 4, Category 1A, Category 1, Category 1
  Hazard statements : H302, H314, H318, H290

- Diethylenetriamine
  Concentration [%] : 1.0 - 5.0
  CAS-No. : 111-40-0
  Hazard classes : Acute toxicity Oral, Acute toxicity Dermal, Acute toxicity Inhalation, Skin corrosion, Skin sensitizer, Specific target organ toxicity - single exposure
  Hazard categories : Category 4, Category 3, Category 2, Category 1B, Category 1, Category 3
  Hazard statements : H302, H311, H330, H314, H317, H335

Components with a community workplace exposure limit

- Potassium hydroxide
- Diethylenetriamine

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: Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician immediately.
- Inhalation: Take person to fresh air. If necessary, seek medical advice.

4.2 Most important symptoms and effects:

4.3 Indication of immediate medical attention and special treatment needed:

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
- Suitable extinguishing media: All extinguishing media are suitable.

5.2 Special hazards arising from the substance or mixture:
- 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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
- Personal precautions: See section : Exposure controls / personnel protection.
- Additional advice: Wash away residues with plenty of water.

6.2 Environmental precautions:
- Environmental precautions: For waste disposal see section 13.

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:
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 acids.

7.3 Specific end use:

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)

- Potassium hydroxide  CAS-No.: 1310-58-3

<table>
<thead>
<tr>
<th>Basis</th>
<th>Revision Date</th>
<th>Value</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>2002</td>
<td>2 mg/m³</td>
<td>Ceiling</td>
</tr>
<tr>
<td>NIOSH</td>
<td>1997</td>
<td>2 mg/m³</td>
<td>REL</td>
</tr>
<tr>
<td>OSHA Z1A</td>
<td>1989</td>
<td>2 mg/m³</td>
<td>Ceiling</td>
</tr>
<tr>
<td>TN OEL</td>
<td>2008</td>
<td>2 mg/m³</td>
<td>Ceiling</td>
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</table>

- Diethylenetriamine  CAS-No.: 111-40-0

<table>
<thead>
<tr>
<th>Basis</th>
<th>Revision Date</th>
<th>Value</th>
<th>Type</th>
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</thead>
<tbody>
<tr>
<td>ACGIH</td>
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<td>1 ppm</td>
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<tr>
<td>NIOSH</td>
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<td>REL</td>
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<tr>
<td>OSHA Z1A</td>
<td>1989</td>
<td>1 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 mg/m³</td>
<td>TWA</td>
</tr>
</tbody>
</table>
Air limit values (CA)

- Potassium hydroxide  
  CAS-No.: 1310-58-3

<table>
<thead>
<tr>
<th>Basis</th>
<th>Revision Date</th>
<th>Value</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD AB OEL</td>
<td>01 1997</td>
<td>2 mg/m3</td>
<td>CEILING</td>
</tr>
<tr>
<td>CAD BC OEL</td>
<td>01 1997</td>
<td>2 mg/m3</td>
<td>CEILING</td>
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<tr>
<td>CAD ON OEL</td>
<td>09 2000</td>
<td>2 mg/m3</td>
<td>CEV</td>
</tr>
<tr>
<td>OEL (QUE)</td>
<td>12 2008</td>
<td>2 mg/m3</td>
<td>CEILING</td>
</tr>
<tr>
<td>CAD SK OEL</td>
<td>05 2009</td>
<td>2 mg/m3</td>
<td>Ceiling</td>
</tr>
<tr>
<td>CAD MB OEL</td>
<td>03 2011</td>
<td>2 mg/m3</td>
<td>CEILING</td>
</tr>
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</table>

- Diethylenetriamine  
  CAS-No.: 111-40-0

<table>
<thead>
<tr>
<th>Basis</th>
<th>Revision Date</th>
<th>Value</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEL (QUE)</td>
<td>12 2008</td>
<td>4.2 mg/m3</td>
<td>TWA</td>
</tr>
<tr>
<td>CAD AB OEL</td>
<td>07 2009</td>
<td>4.2 mg/m3</td>
<td>TWA</td>
</tr>
<tr>
<td>CAD BC OEL</td>
<td>07 2007</td>
<td>1 ppm</td>
<td>TWA</td>
</tr>
<tr>
<td>CAD ON OEL</td>
<td>11 2010</td>
<td>1 ppm</td>
<td>TWAEV</td>
</tr>
<tr>
<td>CAD SK OEL</td>
<td>05 2009</td>
<td>1 ppm</td>
<td>8 HR ACL</td>
</tr>
<tr>
<td>CAD SK OEL</td>
<td>05 2009</td>
<td>2 ppm</td>
<td>15 MIN ACL</td>
</tr>
<tr>
<td>CAD MB OEL</td>
<td>03 2011</td>
<td>1 ppm</td>
<td>TWA</td>
</tr>
</tbody>
</table>

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:

8.2 Exposure controls:
Occupational exposure controls:
  ➢ Instruction measures to prevent exposure:
Technical measures to prevent exposure:

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.

Hand protection: Use chemical resistant gloves. In case of prolonged immersion or frequently repeated contact use gloves made of the materials: butyl rubber (thickness \( \geq 0.36 \) mm, breakthrough time \( > 480 \) min), nitrile rubber (thickness \( \geq 0.38 \) mm, breakthrough time \( > 480 \) min) or neoprene (thickness \( \geq 0.65 \) mm, breakthrough time \( > 240 \) min). For intermittent splash protection corresponding gloves with breakthrough times \( > 60 \) min can be used. Avoid gloves made of: natural latex.

Eye protection: Safety goggles. EN 166.

Personal protective equipment: Employees should wash their hands and face before eating, drinking, or using tobacco products. Emergency showers and eye wash stations should be available. Educate and train employees in the safe use and handling of this product.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties:

9.1.1 Appearance:

State of matter: Liquid
Form: Liquid.
Color: Yellow
Odor: Nearly odourless
Odor threshold: No data available

9.1.2 Important health, safety and environmental information:

pH (25 °C): \( > 13.0 \)
Melting point/range: \(< 0 \) °C
Boiling point/range: \( > 100 \) °C
Flash point: \( > 93.33 \) °C

Not combustible.
Autoignition temperature: No data available
Vapour pressure: No data available
Relative vapour density: Not applicable
Relative density (20 °C): 1.140
Density: No data available
Solubility/qualitative: Miscible with water at all ratios.
Water solubility: completely soluble
Partition coefficient (n-): No data available

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octanol/water)
Viscosity, dynamic : No data available
Viscosity, kinematic : No data available
Lower explosion limit : Not applicable
Upper explosion limit : Not applicable
Evaporation rate : No data available
Flammability (solid, gas) : Not flammable.

9.2 Other information:
VOC content : 0.0 g/l
Ignition temperature : Not applicable

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

10.2 Chemical stability:
Stability : The product is stable under normal conditions of storage and use.

10.3 Possibility of hazardous reactions:

10.4 Conditions to avoid:
Conditions to avoid : Avoid contact with strong acids. Remove all chemicals and rinse the processing tanks thoroughly with water before using any cleansing products.

10.5 Materials to avoid:

10.6 Hazardous decomposition products:
Hazardous decomposition products : None

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Causes severe burns.
May cause sensitization by skin contact.
Toxicity data specific for individual ingredients in their pure state:

Toxicokinetics, metabolism and distribution:
Acute effects (toxicity tests):

- **Acute Toxicity**
  - **Potassium hydroxide**
    - Acute oral toxicity: LD50 rat 273 mg/kg Literature.
    - Acute dermal toxicity: No data available
    - Acute inhalation toxicity: No data available
  - **Diethylenetriamine**
    - Acute oral toxicity: LD50 rat 1,620 mg/kg OECD Test Guideline 401
    - Acute dermal toxicity: LD50 rabbit 672 mg/kg Literature.
    - Acute inhalation toxicity: LC50 rat 0.3 mg/l/ 4 h OECD Test Guideline 403

- **Specific target organ toxicity (STOT):**
  - **Potassium hydroxide**
    - Exposure to the substance can cause chemical burns. The substance works corrosive on the eyes, the skin and the respiratory tract. If swallowed, corrosive. Inhalation may cause lung inflammation and/or pulmonary edema, only after symptoms of corrosive effects on the mucous membranes of eyes and/or upper respiratory tract. In severe cases chance of fatality.
  - **Diethylenetriamine**
    - May cause irritation of respiratory tract. Pulmonary edema after damage respiratory tract.

- **Irritant and corrosive effects:**
  - **Potassium hydroxide**
    - Primary irritation to the skin: rabbit Corrosive Literature.
    - Irritation to eyes: rabbit Causes serious eye irritation. OECD Test Guideline 405
Corrosive to eyes.

- Diethylenetriamine

<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>Causes burns.</td>
<td>Literature.</td>
</tr>
<tr>
<td>Irritation to eyes</td>
<td>rabbit</td>
<td>Causes burns.</td>
<td>Literature.</td>
</tr>
</tbody>
</table>

- Potassium hydroxide
  - No data available

- Diethylenetriamine
  - May cause irritation of respiratory tract.

- Sensitisation:
  - Potassium hydroxide
    - guinea pig
      - Literature.
      - Based on available data, the classification criteria are not met.

- Diethylenetriamine

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>sensitising effects</td>
<td>Mouse local lymphoma assay.</td>
</tr>
</tbody>
</table>

- Aspiration hazard:
  - Potassium hydroxide
    - No data available
  - Diethylenetriamine
    - No data available

**Sub-acute, sub-chronic and chronic toxicity**

- Repeated dose toxicity:
  - Potassium hydroxide
    - No data available
  - Diethylenetriamine

<table>
<thead>
<tr>
<th>Effect dose</th>
<th>Value</th>
<th>Exposure time</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>rat</td>
<td>Method: Literature.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeated or prolonged exposure: The substance can affect the liver, causing damage to the body.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Specific target organ toxicity (STOT):

- Potassium hydroxide
  Repeated exposure | Specific effects | Affected organs
  Skin contact may be damaged by eczema. The dust may affect the upper and lower airways, causing inflammation and impaired lung function. Erosion of the teeth may occur.

- Diethylenetriamine
  May cause damage to organs through prolonged or repeated exposure. Chronic exposure causes drying effect on the skin and eczema. Repeated or prolonged exposure: The substance can affect the liver, causing damage to the body. Can cause eczema by hypersensitivity.

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

- Carcinogenicity
  - Potassium hydroxide
    No carcinogenic effects observed at the doses tested.
  - Diethylenetriamine

- Mutagenicity
  - Potassium hydroxide
    No data available
  - Diethylenetriamine
    Based on available data, the classification criteria are not met.

- Genetic toxicity in vitro
  - Potassium hydroxide

<table>
<thead>
<tr>
<th>Type</th>
<th>Test system</th>
<th>Concentration</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ames test</td>
<td>Escherichia coli WP2 uvr A; Salmonella typhimurium TA98, TA100, TA535, TA1537</td>
<td></td>
<td>negative</td>
</tr>
</tbody>
</table>

Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay) Based on available data, the classification criteria are not met.
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- **Diethylenetriamine**

<table>
<thead>
<tr>
<th>Type</th>
<th>Test system</th>
<th>Concentration</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ames test</td>
<td></td>
<td>negative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  - **Genetic toxicity in vivo**

  - Potassium hydroxide
    
    No data available

  - Diethylenetriamine
    
    No data available

<table>
<thead>
<tr>
<th>Route of exposure</th>
<th>Species</th>
<th>Exposure time</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mouse (male/female)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Method: Mutagenicity (micronucleus test)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Based on available data, the classification criteria are not met.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

  - **Teratogenicity**

  - Potassium hydroxide
    
    No data available

  - Diethylenetriamine
    
    No data available

  - **Toxicity to reproduction**

  - Potassium hydroxide
    
    No data available

  - Diethylenetriamine
    
    No data available

  ➢ **Summarised evaluation of the CMR properties:**

  - Potassium hydroxide
    
    Carcinogenicity: Animal testing did not show any carcinogenic effects.
    
    Mutagenicity: No data available
    
    Teratogenicity: No data available
    
    Toxicity to reproduction: No data available

  - Diethylenetriamine
    
    Carcinogenicity: Based on available data, the classification criteria are not met.
    
    Mutagenicity: Based on available data, the classification criteria are not met.
    
    Teratogenicity: No data available
    
    Toxicity to reproduction: No data available

  **Experiences made in practice:**

  Hazard labelling of this preparation or substance: see section 15.
SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

- Potassium hydroxide

<table>
<thead>
<tr>
<th>Effect</th>
<th>Exposure</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>24 h</td>
<td>Poecilia reticulata (guppy)</td>
<td>165 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Method: Literature. Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
</tbody>
</table>

- Diethylenetriamine

<table>
<thead>
<tr>
<th>Effect</th>
<th>Exposure</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50</td>
<td>96 h</td>
<td>Poecilia reticulata (guppy)</td>
<td>430 mg/l</td>
</tr>
<tr>
<td>NOEC</td>
<td>672 h</td>
<td>Pisces (fish)</td>
<td>&gt; 10 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Method: Literature. Based on available data, the classification criteria are not met.</td>
<td></td>
</tr>
</tbody>
</table>

12.2 Persistence and degradability:

Physico-chemical removability

- Potassium hydroxide
  Neutralization is normally necessary before waste water is discharged into water treatment plants.

- Diethylenetriamine
  No data available

Chemical Oxygen Demand (COD)
• Potassium hydroxide
  No data available
• Diethylenetriamine

<table>
<thead>
<tr>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,315 mg/g</td>
<td>Literature.</td>
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**Adsorbed organic bound halogens (AOX)**

• Potassium hydroxide
  Product does not contain any organic halogens.
• Diethylenetriamine

<table>
<thead>
<tr>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Literature.</td>
</tr>
</tbody>
</table>

**Biodegradation**

• Potassium hydroxide
  The methods for determining biodegradability are not applicable to inorganic substances.
• Diethylenetriamine

<table>
<thead>
<tr>
<th>Value</th>
<th>Exposure time</th>
<th>Method</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>87 %</td>
<td>OECD 301D</td>
<td>Assessment of biological degradability</td>
<td></td>
</tr>
</tbody>
</table>

According to the results of tests of biodegradability this product is considered as being readily biodegradable.

**Biochemical Oxygen Demand (BOD)**

• Potassium hydroxide
  No data available
• Diethylenetriamine
  No data available

**12.3 Bioaccumulative potential:**

**Partition coefficient (n-octanol/water)**

No data available

**Bioconcentration factor (BCF)**

• Potassium hydroxide
  Does not bioaccumulate.
• Diethylenetriamine
12.4 Mobility in soil:

- Potassium hydroxide
  No information available.
- Diethylenetriamine
  completely miscible

**Henry's constant**

- Potassium hydroxide

<table>
<thead>
<tr>
<th>Value</th>
<th>Species</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 6.3</td>
<td>Cyprinus carpio (carp)</td>
<td>OESO 305C</td>
</tr>
</tbody>
</table>

Accumulation in aquatic organisms is unlikely.

- Diethylenetriamine

<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

- Potassium hydroxide
  Transport between environmental compartments can be expected.
- Diethylenetriamine

<table>
<thead>
<tr>
<th>Type</th>
<th>Medium</th>
<th>Value</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>log Koc: 3.4 to 4.6</td>
<td>Literature.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transport between environmental compartments is not expected.</td>
<td></td>
</tr>
</tbody>
</table>

12.5 Results of PBT and vPvB assessment:

- Potassium hydroxide
  This product does not meet the criteria concerning PBT or vPvB substances as described in Annex XIII of the REACH regulation (1907/2006 EC)
- Diethylenetriamine
  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:

- Potassium hydroxide
  Harmful to aquatic organisms.
- Diethylenetriamine
This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer. Neutralization will reduce ecotoxic effects.

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)
When discarded in its purchased form, this product meets the criteria of corrosivity, and should be managed as a hazardous waste (EPA Hazardous Waste Number D002).

SECTION 14. TRANSPORT INFORMATION

CFR_ROAD
UN-No : 1814
Proper shipping name : Potassium hydroxide, solution
Class : 8
Packing group : II
Labelling No. : 8

CFR_RAIL
UN-No : 1814
Proper shipping name : Potassium hydroxide, solution
Class : 8
Packing group : II
Labelling No. : 8

CFR_INWTR
UN-No : 1814
Proper shipping name : Potassium hydroxide, solution
Class : 8
Packing group : II
Labelling No. : 8

TDG_ROAD
UN-No : 1814
Proper shipping name : POTASSIUM HYDROXIDE SOLUTION
Class : 8
Packing group : II
Labelling No. : 8

TDG_RAIL
SAFETY DATA SHEET


G5200c

Version 5

Revision Date 04-07-2015

UN-No : 1814
Proper shipping name : POTASSIUM HYDROXIDE SOLUTION
Class : 8
Packing group : II
Labelling No. : 8

TDG_INWTR
UN-No : 1814
Proper shipping name : POTASSIUM HYDROXIDE SOLUTION
Class : 8
Packing group : II
Labelling No. : 8

IMO / IMDG
UN-No : 1814
Proper shipping name : POTASSIUM HYDROXIDE SOLUTION
Class : 8
Packing group : II
Labelling No. : 8
EmS : F-A, S-B
Marine pollutant : No

ICAO / IATA cargo aircraft only
UN-No : 1814
Proper shipping name : Potassium hydroxide solution
Class : 8
Packing group : II
Labelling No. : 8
Packing instruction : 855

ICAO / IATA passenger and cargo aircraft
UN-No : 1814
Proper shipping name : Potassium hydroxide solution
Class : 8
Packing group : II
Labelling No. : 8
Packing instruction : 851

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.
SAFETY DATA SHEET


G5200c

Version 5

Revision Date 04-07-2015

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

US. EPA CERCLA Hazardous Substances (40 CFR 302)
- Potassium hydroxide : Reportable quantity: 1,000 lbs

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>1310-58-3</td>
<td>&gt;= 5.0 - &lt;= 10.0</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>1310-58-3</td>
<td>&gt;= 5.0 - &lt;= 10.0</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>1310-58-3</td>
<td>&gt;= 5.0 - &lt;= 10.0</td>
</tr>
</tbody>
</table>

US. Rhode Island Hazardous Substances Right-to-Know Act (R.I. Gen. Laws Section 28-21-1 et. seq.)

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1310-58-3</td>
<td>&gt;= 5.0 - &lt;= 10.0</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
D1B : Toxic material causing immediate and serious toxic effects

Canadian Environmental Protection Act (CEPA)
This product contains the following components listed on the Canadian NDSL list. All other components are on the Canadian DSL list.
- 1,4-dimethyl-3-thio-5-(3-butenyl)triazoliumhydroxide

REG_NOAM 18/19 EN
SECTION 16. OTHER INFORMATION

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

- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.
- H335 May cause respiratory irritation.

This MSDS is replacing Agfa MSDS number 782G

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR. 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.