### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

**Trade name:** 3,4-Dimethylphenol  
**Stock number:** A10999, L03522  
**CAS Number:** 95-65-8  
**EC number:** 202-439-5  
**Index number:** 604-006-00-X

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against.

*Identified use:* SU24 Scientific research and development

#### 1.3 Details of the supplier of the safety data sheet

**Manufacturer/Supplier:** Alfa Aesar GmbH & Co.KG  
A Johnson Matthey Company  
Zeppelinstr. 7b  
76185 Karlsruhe / Germany  
Tel: +49 (0) 721 84007 280  
Fax: +49 (0) 721 84007 300  
Email: tech@alfa.com  
www.alfa.com  
Informing department: Product safety Tel + +049 (0) 7275 988687-0  
Emergancy phone number: Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)  
Poison Information Center Mainz  
www.giftinfo.uni-mainz.de  
Telephone: +49(0)6131/19240

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

- **Classification according to Regulation (EC) No 1272/2008**
  - GHS06 skull and crossbones  
  - Acute Tox. 3 H311 Toxic in contact with skin.
  - GHS05 corrosion  
  - Skin Corr. 1B H314 Causes severe skin burns and eye damage.
  - GHS09 environment  
  - Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - T; Toxic  
  - R24/25: Toxic in contact with skin and if swallowed.  
  - C; Corrosive  
  - R34: Causes burns.

- **Classification according to PBT and vPvB assessment**
  - PBT: Not applicable
  - vPvB: Not applicable

#### 2.2 Label elements

- **Labelling according to Regulation (EC) No 1272/2008**
  - Hazard pictograms: GHS06 skull and crossbones  
  - Signal word: Danger  
  - Hazard statements:  
    - P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
    - P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
    - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
    - P361 Remove/Take off immediately all contaminated clothing.  
    - P405 Store locked up.  
    - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### 2.3 Other hazards

- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

- **CAS# Designation:** 95-65-8 3,4-Dimethylphenol  
- **Identification number(s):**  
  - EC number: 202-439-5  
  - Index number: 604-006-00-X

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- **General information**
  - After inhalation: Instantly remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest, provide artificial respiration.  
  - After skin contact: Instantly wash with water and soap and rinse thoroughly.  
  - After eye contact: Rinse opened eye for several minutes under running water. Then consult doctor.

(Contd. on page 2)
Trade name: 3,4-Dimethylphenol

After swallowing
Do not induce vomiting; instantly call for medical help.
4.2 Most important symptoms and effects, both acute and delayed
No further relevant information available.
4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

SECTION 5: Firefighting measures
5.1 Extinguishing media
CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
5.2 Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide
5.3 Advice for firefighters
Wear self-contained breathing apparatus.
Wear full protective suit.

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
6.2 Environmental precautions:
Do not allow material to be released to the environment without proper governmental permits.
Do not allow product to reach sewage system or water bodies.
Do not allow to enter the ground/soil.
6.3 Methods and material for containment and cleaning up:
Use neutralizing agent.
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
Prevention of secondary hazards:
No special measures required.
6.4 Reference to other sections
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage
7.1 Precautions for safe handling
Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.
7.2 Conditions for safe storage, including any incompatibilities
Storage
No special requirements.
Information about storage in one common storage facility:
Store away from oxidizing agents.
Further information about storage conditions:
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Store in a locked cabinet or with access restricted to technical experts or their assistants.
7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection
Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
8.1 Control parameters
Components with critical values that require monitoring at the workplace:
Not required.
Additional information:
No data
8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures should be adhered to in handling the chemicals.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
Maintain an ergonomically appropriate working environment.
Breathing equipment:
Use breathing protection with high concentrations.
Protection of hands:
Check protective gloves prior to each use for their proper condition.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
Material of gloves
Impervious gloves
Penetration time of glove material
Not determined
Eye protection:
Tightly sealed safety glasses.
Body protection:
Protective work clothing.

SECTION 9: Physical and chemical properties
9.1 Information on basic physical and chemical properties
General Information
Appearance:
Crystalline
Form:
Colour:
Yellow
Smell:
Not determined
Odour threshold:
Not determined.
pH-value:
Not applicable.
Change in condition
Melting point/Melting range:
65-68 °C
Boiling point/Boiling range:
Not determined
Sublimation temperature / start:
Not determined
Flash point:
Not applicable
### 3,4-Dimethylphenol

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inflammability (solid, gaseous)</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Ignition temperature</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Self-inflammability</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td><strong>Critical values for explosion:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Steam pressure</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Density at 20 °C</strong></td>
<td>0.983 g/cm³</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Partition coefficient (n-octanol/water):</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>dynamic: Not applicable.</td>
</tr>
<tr>
<td></td>
<td>kinematic: Not applicable.</td>
</tr>
<tr>
<td><strong>9.2 Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

**10.1 Reactivity**
No information known.

**10.2 Chemical stability**
Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**
No decomposition if used and stored according to specifications.

**10.4 Chemical incompatibility materials:**
Oxidizing agents

**10.5 Hazardous decomposition products:**
Carbon monoxide and carbon dioxide

### SECTION 11: Toxicological information

**11.1 Information on toxicological effects**

**Acute toxicity:**
Danger by skin resorption.
Toxic in contact with skin.
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

**LD/LC50 values that are relevant for classification:**

| Oral (L50) | 727 mg/kg (rat) |

**Skin irritation or corrosion:**
Causes severe skin burns.

**Eye irritation or corrosion:**
Irritant effect.

**Sensitization:**
Causes serious eye damage.

**Germ cell mutagenicity:**
No sensitizing effect known.

**Carcinogenicity:**
No effects known.

**Reproductive toxicity:**
No effects known.

**Specific target organ system toxicity - repeated exposure:**
No effects known.

**Specific target organ system toxicity - single exposure:**
No effects known.

**Aspiration hazard:**
No effects known.

**Other information (about experimental toxicology):**
Tumorigenic effects have been observed on tests with laboratory animals.
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
Toxic in contact with skin.

### SECTION 12: Ecological information

**12.1 Toxicity**
-No further relevant information available.

**12.2 Persistence and degradability**
-No further relevant information available.

**12.3 Bioaccumulative potential**
-No further relevant information available.

**12.4 Mobility in soil**
-Toxic for fish

**Ecotoxicological effects:**
Do not allow material to be released to the environment without proper governmental permits.
Toxic for aquatic organisms
Water danger class 3 (Self-assessment): extremely hazardous for water.
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into soil.
Also poisonous for fish and plankton in water bodies.
Toxic to aquatic life.
May cause long lasting harmful effects to aquatic life.
Avoid transfer into the environment.

**12.5 Results of PBT and vPvB assessment**

**PBT:**
Not applicable.

**vPvB:**
Not applicable.

**12.6 Other adverse effects**
No further relevant information available.

### SECTION 13: Disposal considerations

**13.1 Waste treatment methods**
Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.
Consult state, local or national regulations for proper disposal.

**Uncleaned packagings:**
Disposal must be made according to official regulations.

### SECTION 14: Transport information

**UN-Number**
UN2261

**ADR, IMDG, IATA**
DE/E
3,4-Dimethylphenol

14.2 UN proper shipping name
ADR 2261 XYLENOLS, SOLID
IMDG, IATA XYLENOLS, SOLID

14.3 Transport hazard class(es)
ADR

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 (T2) Toxic substances.</td>
<td>6.1</td>
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</table>

IMDG, IATA

<table>
<thead>
<tr>
<th>Class</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Toxic substances.</td>
<td>6.1</td>
</tr>
</tbody>
</table>

Packing group
ADR, IMDG, IATA II

14.5 Environmental hazards:
Environmentally hazardous substance, solid

14.6 Special precautions for user
Warning: Toxic substances.

Kemler Number: 60

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable.

Transport/Additional information:
ADR
Exempted quantities (EQ): E4
Limited quantities (LQ) 500 g
Transport category 2
Tunnel restriction code D/E

UN "Model Regulation": UN2261, XYLENOLS, SOLID, 6.1, II

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Australian Inventory of Chemical Substances Substance is listed.
Standard for the Uniform Scheduling of Drugs and Poisons Substance is not listed.
National regulations Employment restrictions concerning young persons must be observed.
Information about limitation of use: For use only by technically qualified individuals.
Water hazard class: Water danger class 3 (Self-assessment): extremely hazardous for water.
Other regulations, limitations and prohibitive regulations ELINCS (European List of Notified Chemical Substances) Substance is not listed.
Substances of very high concern (SVHC) according to REACH, Article 57 Substance is not listed.
REACH - Pre-registered substances Substance is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent