SAFETY DATA SHEET

CHEMICAL SUBSTANCE / MIXTURE
REGULATION (EC) No 1907/2006 AS AMENDED BY REGULATION (EU) No 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY

1.1. Product identifiers

Product names: Formocresol
Chemical name: -
Identified uses: Chemical analytics, biochemistry

1.2. Details of the supplier of the safety data sheet

Company: JSC "Medicinos linija"
Address: Karaliaučiaus str. 29
LT-78374 Šiauliai, Lithuania
Telephone: +370 41 553 553
Fax: +370 41 553 551
E-mail address: dental@i-dental.lt

1.3. Emergency telephone number

Emergency telephone number: +370 41 553 553
(Available only during office hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute Tox. 3
Skin Corr. 1B
Skin Sens. 1
Skin Irrit. 2
Eye Irrit. 2
STOT SE 3
Skin Corr. (Category 1B)
Skin Sens. (Category 1)
Carc. 2

2.1.1. Label elements

Pictograms

Signal word: Danger

Hazard statements
H301: Toxic if swallowed
H311: Toxic in contact with skin
H331: Toxic if inhaled
H314: Causes severe skin burns and eye damage
H317: May cause an allergic skin reaction
H351: Suspected of causing cancer

Precaution statements (prevention)
P201: Obtain special instructions before use
P280: Wear protective gloves/protective clothing/eye protection/face protection
P260: Do not breathe dust/fume/gas/mist/vapours/spray

Precaution statements (response)
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P301+P330+P311: IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P321: Specific treatment: Immediate administration of an appropriate inhalation therapy by a doctor should be considered
P310: Immediately call a POISON CENTER or doctor/physician
P403+P233: Store in a well-ventilated place. Keep container tightly closed
SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Components of the mixture:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No</th>
<th>EC No</th>
<th>Index No</th>
<th>Hazard statement</th>
<th>Content, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formaldehyde</td>
<td>50-00-0</td>
<td>200-001-8</td>
<td>605-001-00-5</td>
<td>H301, H311, H314, H317, H331, H351</td>
<td>10-30</td>
</tr>
<tr>
<td>Mixture of Cresols</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>H301, H311, H314</td>
<td>20-40</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1. General advice
In doubt, consult a physician. Show this safety data sheet to the doctor in attendance.

4.2. If inhaled
Remove the casualty from the hazardous area and take him to the fresh air. If not breathing, give artificial respiration. Consult a physician.

4.3. In case of skin contact
Take off contaminated clothing. Wash off with soap and plenty of water. Consult a physician. Wash contaminated clothing before reuse. ON FROSTBITE: rinse with plenty of water, do NOT remove clothes. Refer for medical attention.

4.4. In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Refer for medical attention.

4.5. If swallowed
Never give anything by mouth to an unconscious person. Take casualty to the hospital. If the person is conscious rinse mouth with water, spit out the solution residues. Do not induce vomiting. Refer for medical attention.

4.6. Most important symptoms and effects, both acute and delayed

4.7. Indication of any immediate medical attention and special treatment needed
Immediate administration of an appropriate inhalation therapy by a doctor or a person authorized by him/her, should be considered.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media
Shut off supply; if not possible and no risk to surroundings, let the fire burn itself out. In other cases extinguish with powder, carbon dioxide.

5.2. Advice for fire fighters
Mop up spills on flooring; use inert material such as vermiculite, dry sand, earth or other absorbent material. Do not flush into sewer.

5.3. Special hazards arising from the substance or mixture
Extremely flammable. Risk of explosion on contact with strong oxidants, strong acids or strong bases.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid vapour formation. Do not breathe vapours, mist or gas. NO open flames, NO sparks and NO smoking. Closed system, ventilation, explosion-proof electrical equipment and lighting. NO contact with incompatible materials.

6.2. Environmental precautions
Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. Carefully collect remainder. Then store and dispose of according to local regulations.

6.3. Methods and materials for containment and cleaning up
Minor spills – Ventilate area of spill. Clear area of personnel. Wear appropriate personal protective equipment and avoid contact with skin. Clean up immediately using inert material such as vermiculite, dry sand, earth or other absorbent material. Do not flush into sewer.
Major spills – Ventilate area of spill. Clear area of personnel. Restrict access to area. Eliminate sources of ignition. Ventilate area of spill. Clear area of personnel. Wear appropriate PPE (such as an air supplied respirator) and avoid contact with skin. Clean up immediately using inert material such as vermiculite, dry sand, earth or other absorbent material. Do not flush into sewer.

6.4. Reference to other sections
For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling
Use personal protective equipment. Avoid vapour formation. Do not breathe vapours, mist or gas. Closed system, ventilation, explosion-proof electrical equipment and lighting. Wash hands thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
7.2. **Conditions for safe storage, including any incompatibilities**

Fireproof. Cool. Separated from food and feedstuffs and incompatible materials. The substance polymerizes in contact with alkalies and if dissolved in water. Upon heating, toxic fumes are formed. Reacts violently with strong oxidants, strong acids and strong bases. This generates explosion hazard. The gas mixes well with air, explosive mixtures are easily formed.

7.3. **Specific end uses**

Chemical analytics, biochemistry.

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**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

8.1. **Exposure limit values**

No exposure guidelines have been established for mixture. ACGIH, NIOSH and OSHA have not developed exposure limits for this product.

Formaldehyde: LV: 0.3ppm (ceiling value); (SEN); A2 (suspected human carcinogen); (ACGIH 2011). MAK: 0.3 ppm, 0.37 mg/m³. Carcinogen category: 4; Peak limitation category: I(2); Pregnancy risk group: C; Germ cell mutagen group: 5; Sensitization of skin (SH); (DFG 2011).EU OEL:. EU OEL (selected): SCOEL recommendation available.

Cresols: TLV: 5ppm as TWA; (skin); (ACGIH 2008). MAK: Carcinogen category: 3A; Skin absorption (H); BAT issued; (DFG 2008).

8.2. **Exposure controls**

Install ventilation to prevent vapour formatting.

Handling properly (p.7).

Preventive medical check-ups should be arranged.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

8.3. **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Do not smoke when handle.

8.4. **Personal protective equipment**

8.4.1. **Eye/face protection**

Wear eye / face protection equipment. Safety glasses with side-shields, conforming to EN 166.

8.4.2. **Hand protection**

Handle with chemical resistance (PVC, neoprene, rubber) gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

8.4.3. **Skin protection**

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.4.4. **Respiratory protection**

To protect the airways use respirators, that have been tested and approved by the relevant governmental standards, such as CEN (EU) or NIOSH (USA).

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1. **General information**

| Appearance | Clear liquid |
| Colour    | Colourless  |
| Odour     | Specific    |

9.2. **Important health, safety and environment information**

| Flash point | No data available |
| Specific gravity | No data available |
| Refractive index | No data available |
| Viscosity at 25°C | No data available |
| Solubility | No data available |

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**SECTION 10: STABILITY AND REACTIVITY**

10.1. **Stability**

Stable under normal temperature and pressure.

10.2. **Conditions to avoid**

No data available.

10.3. **Materials to avoid**

The substance polymerizes in contact with alkalies and if dissolved in water. Upon heating, toxic fumes are formed. Reacts violently with strong oxidants, strong acids and strong bases. This generates explosion hazard. The gas mixes well with air, explosive mixtures are easily formed.

10.4. **Hazard decomposition products**

Carbon dioxide, monoxide.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

11.1. **Possible dangerous to health effects**

The substance can be absorbed into the body by inhalation, through the skin and by ingestion. Serious by all
11.2. **Signs and Symptoms of Exposure**
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Detailed in p.4.6.

11.3. **Toxicity**
No data available.

11.4. **Skin corrosion/irritation**
No data available.

11.5. **Serious eye damage/eye irritation**
No data available.

11.6. **Respiratory or skin sensitization**
A harmful concentration of this gas in the air will be reached very quickly on loss of containment.

11.7. **Germ cell mutagenicity**
No data available.

11.8. **Carcinogenicity**
IARC Carcinogen category: 4.

11.9. **Reproductive toxicity**
No data available.

11.10. **Specific target organ toxicity - single exposure**
The substance is corrosive to the eyes, skin and respiratory tract. Corrosive on ingestion. Inhalation of high concentrations may cause lung oedema, but only after initial corrosive effects on the eyes and the upper respiratory tract have become manifest. The substance may cause effects on the central nervous system. This may result in lowering of consciousness. The substance may cause effects on the blood. This may result in destruction of blood cells. Exposure far above the OEL could cause death. Medical observation is indicated.

11.11. **Specific target organ toxicity - repeated exposure**
Repeated or prolonged contact with skin may cause dermatitis. The substance may have effects on the nervous system. This may result in impaired functions. The substance may have effects on the blood. This may result in anaemia. Repeated or chronic inhalation of the vapor may cause chronic inflammation of the upper respiratory tract. Repeated or prolonged contact may cause skin sensitization. This substance is carcinogenic to humans.

11.12. **Aspiration hazard**
No data available.

11.13. **Additional Information**
No data available.

### SECTION 12: ECOLOGICAL INFORMATION

| 12.1. Ecotoxicity       | No data available |
| 12.2. Mobility          | No data available |
| 12.3. Persistence and degradability | No data available |
| 12.4. Bio accumulative potential | No data available |
| 12.5. Results of PBT and vPvB assessment | No data available |
| 12.6. Other adverse effects | No data available |

### SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging dispose of as unused product. Do not remove the information from package. Manage waste as required by regulatory requirements. Avoid release to the environment.

### SECTION 14: TRANSPORT INFORMATION

| 14.1. UN number: ID 8000 |
| 14.2. Proper shipping name: Consumer commodity |
| 14.3. Hazard class: 9 |
| 14.4. Packing group: - |
| 14.5. Special provisions: A112 |

### SECTION 15: REGULATORY INFORMATION

15.2. Other Regulations: EINECS: Components of mixture are on the European Inventory of Existing Commercial Chemical Substances.
15.3. This safety data sheet information is not a professional risk assessment.
15.4. Safety, health and environmental regulations/legislation specific for the substance or mixture
SECTION 16: OTHER INFORMATION

16.1. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

16.2. UAB „Medicinos linija“ shall not be held liable for any damage resulting from handling or from contact with the above product.

16.3. The product should not be used for purposes other than specified in p.7.3 purposes.

16.4. User is responsible for the legal, regulatory compliance.

16.5. Abbreviations and acronyms used in the safety data sheet:

16.5.1. EC – European Commission
16.5.2. EEC – European Economic Community
16.5.3. EU – European Union
16.5.4. GHS – Globally Harmonized System
16.5.5. CLP – Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
16.5.6. CAS No – Chemical Abstracts Service number
16.5.7. EC No – EINECS and ELINCS Number (see also EINECS and ELINCS)
16.5.8. EINECS – European Inventory of Existing Commercial Substances
16.5.9. ELINCS – European List of notified Chemical Substances
16.5.10. EN – European Standard
16.5.11. NIOSH - National Institute for Occupational Safety and Health
16.5.12. IARC – International Agency for Research on Cancer
16.5.13. PBT - Persistent, Bio accumulative and toxic substance
16.5.14. VPvB – Very Persistent and Very Bio accumulative
16.5.15. ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road
16.5.16. RID – Regulations concerning the International Carriage of Dangerous Goods by Rail
16.5.17. UN – United Nations
16.5.18. IMDG – International Maritime Dangerous Goods
16.5.20. IATA-DGR – International Air Transport Association Dangerous Goods Regulations
16.5.21. LC50 – Lethal Concentration to 50 % of a test population
16.5.22. LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose)


16.7. List of relevant hazard statements, safety phrases and/or precautionary statements full text:

**Signal word: Danger**

H301: Toxic if swallowed
H311: Toxic in contact with skin
H331: Toxic if inhaled
H314: Causes severe skin burns and eye damage
H317: May cause an allergic skin reaction
H351: Suspected of causing cancer
P280: Wear protective gloves/protective clothing/eye protection/face protection
P281: Use personal protective equipment as required
P264: Wash hands thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P260: Do not breathe dust/fume/gas/mist/vapours/spray
P264: Wash hands thoroughly after handling
P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P272: Contaminated work clothing should not be allowed out of the workplace
P271: Use only outdoors or in a well-ventilated area
P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood
P312: Call a POISON CENTER or doctor/physician if you feel unwell
P302+P352: IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P361: Remove/Take off immediately all contaminated clothing
P363: Wash contaminated clothing before reuse
P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P201+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P310: Immediately call a POISON CENTER or doctor/physician
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P333+P313: If skin irritation or rash occurs: Get medical advice/attention
P308+P313: If exposed or concerned: Get medical advice/attention
P321: Specific treatment: Immediate administration of an appropriate inhalation therapy by a doctor should be considered
P322: Specific measures (see SECTION 8)
P403+P233: Store in a well-ventilated place. Keep container tightly closed
P405: Store locked up
P501: Dispose of contents/container to as required by regulatory requirements

16.8. Training advice: Person who handles this mixture must obtain special instructions before use and do not handle until all safety precautions have been read and understood. How to properly handle chemical substances / Mixtures employees must be trained in accordance with national requirements.