SECTION 1: Identification

1.1. Identification
Product form : Mixture, Liquid
Product name : TransFix
Product code : CAL001

1.2. Recommended use and restrictions on use
Use of the substance/mixture : Health Care

1.3. Supplier
Cytomark, a division of Caltag Medsystems
Whiteleaf Business Centre
11 Little Balmer
Buckingham, MK18 1TF - United Kingdom
T +44 1280 827460
Support@cytomark.co.uk

1.4. Emergency telephone number
Emergency number : +44 (0)1280 827460

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS US classification
Skin sensitization, Category 1  H317  May cause an allergic skin reaction
Carcinogenicity Category 1B  H350  May cause cancer
Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements
GHS US labeling
Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : H317 - May cause an allergic skin reaction
H350 - May cause cancer
Precautionary statements (GHS US) :
P261 - Avoid breathing fume, mist, spray, vapors.
P280 - Wear protective gloves, protective clothing, eye protection.
P302+P352 - If on skin: Wash with plenty of soap and water
P308+P313 - If exposed or concerned: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.

2.3. Other hazards which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>formaldehyde</td>
<td>(CAS-No.) 50-00-0</td>
<td>&lt; 1</td>
<td>Acute Tox. 3 (Oral), H301</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 3 (Dermal), H311</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Acute Tox. 3 (Inhalation), H331</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Corr. 1B, H314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Sens. 1, H317</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mut. 2, H341</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carc. 1B, H350</td>
</tr>
</tbody>
</table>
SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: If experiencing respiratory symptoms: Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.

First-aid measures after skin contact: If skin irritation or rash occurs: Gently wash with plenty of soap and water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Get medical advice/attention. Wash contaminated clothing before reuse.

First-aid measures after eye contact: Rinse immediately with plenty of water. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: If you feel unwell, seek medical advice. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects: May cause cancer.

Symptoms/effects after inhalation: May cause respiratory irritation.

Symptoms/effects after skin contact: May cause an allergic skin reaction.

Symptoms/effects after eye contact: May cause eye irritation.

Symptoms/effects after ingestion: Ingestion may cause nausea, vomiting and diarrhea.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard: The product is not flammable.

Explosion hazard: Product is not explosive.

5.3. Special protective equipment and precautions for fire-fighters

Precautionary measures fire: Exercise caution when fighting any chemical fire.

Firefighting instructions: Prevent fire-fighting water from entering environment. Use water spray or fog for cooling exposed containers.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Ensure adequate ventilation. Avoid breathing vapour or mist. Avoid contact with skin and eyes.

6.1.1. For non-emergency personnel

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: “Exposure controls/personal protection”.

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection. For further information refer to section 8: “Exposure controls/personal protection”.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment: Absorb spillage.

Methods for cleaning up: Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
6.4. Reference to other sections
For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13: "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Avoid contact with skin and eyes. Always wash hands after handling the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing fume, mist, spray, vapors. Do not handle until all safety precautions have been read and understood.

Hygiene measures: Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures: Does not require any specific or particular technical measures.
Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Direct sunlight. Keep container closed when not in use.
Incompatible products: Strong bases. Strong acids.
Incompatible materials: Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Substance</th>
<th>Local name</th>
<th>USA - ACGIH - Occupational Exposure Limits</th>
<th>Regulatory reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>TransFix</td>
<td>Formaldehyde</td>
<td>ACGIH TWA (ppm) 0.1 ppm</td>
<td>ACGIH 2019</td>
</tr>
<tr>
<td>formaldehyde (50-00-0)</td>
<td></td>
<td>ACGIH STEL (ppm) 0.3 ppm</td>
<td></td>
</tr>
<tr>
<td>USA - ACGIH - Occupational Exposure Limits</td>
<td>URT &amp; eye irr; URT cancer; DSEN; RSEN; A1 (Confirmed Human Carcinogen: The agent is carcinogenic to humans based on the weight of evidence from epidemiologic studies)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls
Appropriate engineering controls: Ensure adequate ventilation.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Hand protection:
Wear chemically resistant protective gloves. Standard EN 374 - Protective gloves against chemicals.

Eye protection:
Chemical goggles or safety glasses. Standard EN 166 - Personal eye-protection - specifications.

Skin and body protection:
Wear suitable protective clothing.

Respiratory protection:
Wear respiratory protection.

Other information:
Do not eat, drink or smoke during use.
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>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Green</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7 - 7.4</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 70 °C</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility (water)</td>
<td>Solubility in water of component(s)</td>
</tr>
<tr>
<td></td>
<td>of the mixture:</td>
</tr>
<tr>
<td></td>
<td>• formaldehyde: 950000 mg/l</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Toxicity</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**formaldehyde (50-00-0)**

<table>
<thead>
<tr>
<th>Test</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE US (oral)</td>
<td>100 mg/kg body weight</td>
</tr>
<tr>
<td>ATE US (dermal)</td>
<td>270 mg/kg body weight</td>
</tr>
</tbody>
</table>
formaldehyde (50-00-0)

**ATE US (gases)**
700 ppmV/4h

**ATE US (vapors)**
3 mg/l/4h

**ATE US (dust, mist)**
0.5 mg/l/4h

Skin corrosion/irritation: Not classified

pH: 7 - 7.4

Serious eye damage/irritation: Not classified

pH: 7 - 7.4

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: May cause cancer.

formaldehyde (50-00-0)

IARC group 1 - Carcinogenic to humans

National Toxicology Program (NTP) Status Known Human Carcinogens

Reproductive toxicity: Not classified

Specific target organ toxicity – single exposure: Not classified

Specific target organ toxicity – repeated exposure: Not classified

Aspiration hazard: Not classified

Viscosity, kinematic: No data available

Symptoms/effects: May cause cancer.

Symptoms/effects after inhalation: May cause respiratory irritation.

Symptoms/effects after skin contact: May cause an allergic skin reaction.

Symptoms/effects after eye contact: May cause eye irritation.

Symptoms/effects after ingestion: Ingestion may cause nausea, vomiting and diarrhea.

**SECTION 12: Ecological information**

12.1. **Toxicity**

formaldehyde (50-00-0)

<table>
<thead>
<tr>
<th>Test/Species</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>6.7 mg/l</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 1</td>
<td>5.8 mg/l waterflea</td>
</tr>
<tr>
<td>EC50 other aquatic organisms 2</td>
<td>3.48 mg/l</td>
</tr>
</tbody>
</table>

12.2. **Persistence and degradability**

TransFix

Persistence and degradability: Not established.

12.3. **Bioaccumulative potential**

TransFix

Bioaccumulative potential: Not established.

formaldehyde (50-00-0)

<table>
<thead>
<tr>
<th>Test/Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Pow</td>
<td>0.779</td>
</tr>
</tbody>
</table>

12.4. **Mobility in soil**

No additional information available

12.5. **Other adverse effects**

Other information: Avoid release to the environment.
SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT
Not applicable

Transportation of Dangerous Goods
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

formaldehyde (50-00-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

<table>
<thead>
<tr>
<th>CERCLA RQ</th>
<th>RQ (Reportable quantity, section 304 of EPA’s List of Lists)</th>
<th>SARA Section 302 Threshold Planning Quantity (TPQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 lb</td>
<td>100 lb</td>
<td>500 lb</td>
</tr>
</tbody>
</table>

15.2. International regulations

CANADA

EU-Regulations

National regulations

formaldehyde (50-00-0)
Listed on IARC (International Agency for Research on Cancer)
Listed as carcinogen on NTP (National Toxicology Program)

15.3. US State regulations

formaldehyde (50-00-0)

<table>
<thead>
<tr>
<th>U.S. - California - Proposition 65 - Carcinogens List</th>
<th>U.S. - California - Proposition 65 - Developmental Toxicity</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</th>
<th>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</th>
<th>No significant risk level (NSRL)</th>
<th>Maximum allowable dose level (MADL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>40</td>
<td>No</td>
</tr>
</tbody>
</table>

SECTION 16: Other information
Data sources:

Other information:
None.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H301</th>
<th>Toxic if swallowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>H311</td>
<td>Toxic in contact with skin</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>H341</td>
<td>Suspected of causing genetic defects</td>
</tr>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.