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

1.1. Product identifier

Thermochromic Ink

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

Product Use

[SU22] Professional uses: Public domain (administration, education, entertainment, services, craftsmen); [PC18] Ink and toners; [PROC5] Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact); [ERC2] Formulation of Aqueous temperature sensitive colour change pigment dispersion.

1.3. Details of the supplier of the safety data sheet

Company: Good Life Innovations Ltd
Address: Unit 6, Basepoint
Newhaven
BN9 9BA

Web: www.goodlifeinnovations.com
Telephone: +44 (0) 207 118 3123
Fax: +44 (0) 871 714 3413
Email: sales@goodlifeinnovations.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification - 67/548/EEC

Xi; R43
Symbols: Xi: Irritant.
May cause sensitisation by skin contact.

2.1.2. Classification - EC 1272/2008

Skin Sens. 1: H317;

2.2. Label elements

Hazard pictograms

Signal Word: Warning

Hazard Statement: Skin Sens. 1: H317 - May cause an allergic skin reaction.

Precautionary Statement: Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement: Response

P302+P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see on this label).
2.2. Label elements

2.3. Other hazards

Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.1. Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Index No.</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>REACH Registration Number</th>
<th>Conc. (w/w)</th>
<th>Classification</th>
<th>M-factor.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non hazardous components</td>
<td>90 - 100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colour developer</td>
<td>1 - 10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formaldehyde... %</td>
<td>605-001-00-5</td>
<td>50-00-0</td>
<td>200-001-8</td>
<td></td>
<td>0 - 0.5%</td>
<td>Carc. Cat. 3; R40 T;</td>
<td>R23/24/25 C; R34 R43</td>
</tr>
</tbody>
</table>

EC 1272/2008

<table>
<thead>
<tr>
<th>Chemical Name</th>
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<td></td>
<td>0 - 0.5%</td>
<td>Carc. Cat. 3; R40 T;</td>
<td>R23/24/25 C; R34 R43</td>
</tr>
</tbody>
</table>

3.2. Mixtures

Refer to Section 3.1.

SECTION 4: First aid measures

4.1. Description of first aid measures

**Inhalation**
Irritating to respiratory system. Inhalation may cause coughing, tightness of the chest and irritation of the respiratory system. Move the exposed person to fresh air. Seek medical attention.

**Eye contact**
Irritating to eyes. Rinse immediately with plenty of water for 15 minutes holding the eyelids open. Seek medical attention if irritation or symptoms persist.

**Skin contact**
Irritating to skin. Wash off immediately with plenty of soap and water. Remove contaminated clothing. Seek medical attention if irritation or symptoms persist.

Ingestion may cause nausea and vomiting. Seek medical attention if irritation or symptoms persist. DO NOT INDUCE VOMITING.

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

**Inhalation**
Irritant, moderate respiratory.

**Eye contact**
Irritating to eyes.

**Skin contact**
Avoid contact with skin. Irritating to skin.

Ingestion may cause nausea and vomiting.

4.3. Indication of any immediate medical attention and special treatment needed
<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Coughing, difficulty in breathing. If breathing is difficult give oxygen.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Seek medical attention if irritation or symptoms persist.</td>
</tr>
<tr>
<td></td>
<td>May cause sensitisation by skin contact. Wash off immediately with plenty of soap and water.</td>
</tr>
</tbody>
</table>

**SECTION 5: Firefighting measures**

5.1. Extinguishing media
5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture

- Burning produces irritating, toxic and obnoxious fumes.

5.3. Advice for firefighters

**SECTION 6: Accidental release measures**

- Ensure adequate ventilation of the working area. Wear suitable protective equipment.

**SECTION 7: Handling and storage**

- Avoid contact with eyes and skin. Ensure adequate ventilation of the working area. Adopt best Manual Handling considerations when handling, carrying and dispensing.

7.1. Precautions for safe handling

7.2. Conditions for safe storage, including any incompatibilities

- Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.

7.3. Specific end use(s)

- Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**SECTION 8: Exposure controls/personal protection**

8.1. Control parameters

8.1.1. Exposure Limit Values

<table>
<thead>
<tr>
<th>Substance</th>
<th>WEL 8-hr limit ppm</th>
<th>WEL 8-hr limit mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chameleon Dispersion BPA Free</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Formaldehyde…%</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.5</td>
</tr>
</tbody>
</table>
8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure adequate ventilation of the working area.
### 8.2. Exposure controls

#### 8.2.2. Individual protection measures

<table>
<thead>
<tr>
<th>Protection</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye / face protection</td>
<td>Approved safety goggles.</td>
</tr>
<tr>
<td>Skin protection - Handprotection</td>
<td>Chemical resistant gloves (PVC).</td>
</tr>
<tr>
<td>Respiratory protection</td>
<td>Wear: Suitable respiratory equipment.</td>
</tr>
</tbody>
</table>

### 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>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Various colours according to type.</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>pH</td>
<td>5 - 5.5</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

- No data available.

#### 10.2. Chemical stability

- Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

- No Significant Hazard.

#### 10.4. Conditions to avoid

- Protect from frost.

#### 10.5. Incompatible materials

- Alkalis.

#### 10.6. Hazardous decomposition products

- Formaldehyde may be generated and other harmful fumes.

### SECTION 11: Toxicological information

#### Acute toxicity

- May cause sensitisation by skin contact.

#### 11.1. Information on toxicological effects

#### 11.1.4. Toxicological Information

<table>
<thead>
<tr>
<th>Substance</th>
<th>Oral Rat LD50: 3400 mg/kg</th>
<th>Oral Rat LD50: 500 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour developer</td>
<td>Inhalation Rat LC50/2H h: 250 ppm</td>
<td>Oral Mouse LD50: 500 mg/kg</td>
</tr>
<tr>
<td>Formaldehyde…%</td>
<td>Oral Mouse LD50: 500 mg/kg</td>
<td>Inhalation Mouse LC50/2H h: 505 mg/m3</td>
</tr>
<tr>
<td>Dermal Rabbit LD50:</td>
<td>270 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

### SECTION 12: Ecological information
12.1. Toxicity

|            | No data available |

12.2. Persistence and degradability

|            | No data is available on this product |

12.3. Bioaccumulative potential

|            | No data is available on this product |
12.4. Mobility in soil
12.5. Results of PBT and vPvB assessment

No data is available on this product.

12.6. Other adverse effects

SECTION 13: Disposal considerations

Absorb with inert, absorbent material.

13.1. Waste treatment methods
General information
Dispose of in compliance with all local and national regulations.

Disposal methods
Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14: Transport information

The product is not classified as dangerous for carriage.

14.1. UN number
14.2. UN proper shipping name

The product is not classified as dangerous for carriage.

The product is not classified as dangerous for carriage.

14.3. Transport hazard class(es)
14.4. Packing group

The product is not classified as dangerous for carriage.

The product is not classified as dangerous for carriage.

14.5. Environmental hazards
14.6. Special precautions for user

The product is not classified as dangerous for carriage.

The product is not classified as dangerous for carriage.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Further information

The product is not classified as dangerous for carriage.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out.

CLP classification of Formaldehyde on this SDS is in accordance with COMMISSION REGULATION (EU) 2015/491 of 23 March 2015 amending Regulation (EU) No 605/2014, the new/updated entries for harmonised classification and labelling of substances apply from 1

SECTION 16: Other information

Other information

<table>
<thead>
<tr>
<th>Text of risk phrases in Section 3</th>
<th>R23/24/25 - Toxic by inhalation, in contact with skin and if swallowed.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R34 - Causes burns.</td>
</tr>
<tr>
<td></td>
<td>R36/37/38 - Irritating to eyes, respiratory system and skin.</td>
</tr>
<tr>
<td></td>
<td>R40 - Limited evidence of a carcinogenic effect.</td>
</tr>
<tr>
<td>Text of Hazard Statements in</td>
<td>Skin Irrit. 2: H315 - Causes skin irritation.</td>
</tr>
<tr>
<td></td>
<td>Eye Irrit. 2: H319 - Causes serious eye irritation.</td>
</tr>
<tr>
<td></td>
<td>STOT SE 3: H335 - May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in