

SAFETY DATA SHEET

according to 1907/2006/EC, Article 31

Thermochromic Ink

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

Revision date 2015-07-08

Product name	Thermochromic Ink
---------------------	-------------------

- 1.1. Product identifier
- 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.
Main hazards	May cause sensitisation by skin contact.
2.1.2. Classification - EC	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).

Precautionary Statement: Disposal	P501 - Dispose of contents/container to
--------------------------------------	---

2.2. Label elements

2.3. Other hazards

Other hazards	No data available.
---------------	--------------------

SECTION 3: Composition/information on ingredients

3.1. Substances

67/548/EEC / 1999/45/EC

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (% w/w)	Classification	M-factor.
Non hazardous components						90 - 100%	
Colour developer					1 - 10%	Xi; R36/37/38	
Formaldehyde...%	605-001-00-5	50-00-0	200-001-8		0 - 0.5%	Carc. Cat. 3; R40 T; R23/24/25 C; R34 R43	

EC 1272/2008

Chemical Name	Index No.	CAS No.	EC No.	REACH Registration Number	Conc. (% w/w)	Classification	M-factor.
Non hazardous components						90 - 100%	
Colour developer					1 - 10%	Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335;	
Formaldehyde...%	605-001-00-5	50-00-0	200-001-8		0 - 0.5%	Carc. 1B: H350; Muta. 2: H341; Acute Tox. 3: H331; Acute Tox. 3: H311; Acute Tox. 3: H301; Skin Corr. 1B: H314; Skin Sens. 1: H317;	

	Refer to Section 3.1.
--	-----------------------

3.2. Mixtures

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

Inhalation	Coughing, difficulty in breathing. If breathing is difficult give oxygen.
Eye contact	Seek medical attention if irritation or symptoms persist.
	May cause sensitisation by skin contact. Wash off immediately with plenty of soap and water.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Carbon oxides.

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture

Burning produces irritating, toxic and obnoxious fumes.

Wear suitable respiratory equipment when necessary.

5.3. Advice for firefighters

SECTION 6: Accidental release measures

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

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

Do not allow product to enter drains. Prevent further spillage if safe.

Absorb with inert, absorbent material. Sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water.

6.3. Methods and material for containment and cleaning up

6.4. Reference to other sections

For disposal see section 13.

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

Chameleon Dispersion BPA Free	WEL 8-hr limit ppm: 2	WEL 8-hr limit mg/m3: 2.5
	WEL 15 min limit ppm: 2	WEL 15 min limit mg/m3: 2.5
	WEL 8-hr limit mg/m3 total inhalable dust: -	WEL 15 min limit mg/m3 total inhalable dust: -
	WEL 8-hr limit mg/m3 total: -	WEL 15 min limit mg/m3 total: -
Formaldehyde...%	WEL 8-hr limit ppm: 2	WEL 8-hr limit mg/m3: 2.5
	2	2.5

	WEL 15 min limit ppm: -	WEL 15 min limit mg/m3: -
	WEL 8-hr limit mg/m3 total inhalable dust	WEL 15 min limit mg/m3 total inhalable dust

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	Wear chemical protective clothing.
Eye / face protection	Approved safety goggles.
Skin protection - Handprotection	Chemical resistant gloves (PVC).
Respiratory protection	Wear: Suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Various colours according to type.
Odour	Characteristic
pH	5 - 5.5

SECTION 10: Stability and reactivity

	No data available.
--	--------------------

10.1. Reactivity

10.2. Chemical stability

	Stable under normal conditions.
--	---------------------------------

	No Significant Hazard.
--	------------------------

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

	Protect from frost.
--	---------------------

	Alkalis.
--	----------

10.5. Incompatible materials

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

Colour developer	Oral Rat LD50: 3400 mg/kg	
Formaldehyde...%	Inhalation Rat LC50/2H h: 250 ppm	Oral Rat LD50: 500 mg/kg
	Oral Mouse LD50: 500 mg/kg	Inhalation Mouse LC50/2H h: 505 mg/m3
	Dermal Rabbit LD50: 270 mg/kg	

SECTION 12: Ecological information

12.1. Toxicity

	No data available
--	-------------------

12.2. Persistence and degradability

	No data is available on this product.
--	---------------------------------------

	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.
--	---------------------------------------

	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.
--	---

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

Disposal methods

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

Regulations	<p>This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and</p> <hr/> <p>REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94</p>
-------------	---

93/105/EC and 2000/21/EC.

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

Further information

SECTION 16: Other information

Other information

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

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

Further information
