

(In compliance with EC/1907/2006 Article 31 and Annex II)

Revision Date: 4/12/2013

Revision Number: 1

Material/Trade Name: MK50 FOTOMASK

**1 – Identification of Substance/Mixture and of the Company/Undertaking**

Material/Trade Name : MK50 Fotomask  
 Material type : Photographic process reagent  
 Company : Jay House Ltd  
 Address : 6B Park Lane Industrial Estate  
 Park Lane  
 Corsham  
 SN13 9LG  
 Telephone : 01249 714555  
 Fax : 01249 714999  
 Internet : info@fotospeed.com

**2 – Hazards Identification****Classification of the substance or mixture***According to Regulation (EC) No.1272/2008*

Flammable liquids (Category 2)	H225	Highly flammable liquid and vapour
Reproductive toxicity (Category 2)	H361d	Suspected of damaging the unborn child
Specific target organ toxicity - repeated exposure (Category 2)	H373i	May cause damage to organs through prolonged or repeated exposure through inhalation
Skin irritation (Category 2)	H315	Causes skin irritation
Eye irritation (Category 2)	H319	Causes serious eye irritation
Specific target organ toxicity - single exposure (Category 3)	H336	May cause drowsiness or dizziness

*According to European Directive 67/548/EEC as amended*

F; Flammable, Xn; Harmful

R11	Highly flammable
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R63	Possible risk of harm to the unborn child
R36/37/38	Irritating to eyes, respiratory system and skin

**3 – Composition/Information on Ingredients**

CAS No.	EC No.	Index No.	Classification	Concentration
Toluene				
108-88-3	203-625-9	601-021-00-3	Flam. Liq.2, Asp. Tox. 1, Repr. 2 Skin Irrit. 2, STOT – RE 2, STOT - SE 3 H225, H361d, H304, H373i, H315, H336 F; R11 Xn; R65-48/20-63-38-67	65%
Butan-2-one				
78-93-3	201-159-0	606-002-00-3	Flam. Liq.2, Skin Irrit. 2, STOT - SE 3 H225, H319, H335, H336, EUH066 F; R11 Xi; R36-66-67	35%

**5 - Fire-fighting Measures****Suitable Extinguishers**

Use media such as alcohol/aqueous foam, dry chemical, or carbon dioxide or water spray/fog. For large fires, solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

**Unsuitable Extinguishers**

Direct water jets may be ineffective under certain conditions.

**Hazardous Decomposition**

Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion

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## 5 - Fire-fighting Measures (continued)

### Special Procedures/information for firefighters

Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Use water spray to cool containers. Use water fog to disperse vapours and leaks that have not ignited. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

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## 6 - Accidental Release Measures

### Personal Protection and Precautions

Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours. Ensure adequate ventilation. Eliminate all sources of ignition in the vicinity of the spill or released vapour.

### Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

### Containment, Cleaning up and Disposal Considerations

Absorb in inert material such as sand or non-combustible absorbent granules. Scoop up and place in plastic container to await transfer.

Refer to Section 13 for further information regarding disposal.

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## 7 - Handling and Storage

### Handling

Avoid inhalation of vapour or mist.

### Storage

Keep container tightly closed in a dry and well-ventilated place.

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## 8 - Exposure Controls/Personal Protection

**Occupational Exposure Limit:** 191 mg/m<sup>3</sup> 8hrTWA, 3849 mg/m<sup>3</sup> 15minSTEL WEL Toluene (Sk)  
600 mg/m<sup>3</sup> 8hrTWA, 899 mg/m<sup>3</sup> 15minSTEL WEL Butan-2one (Sk)

### Respiratory Protection

Use in well ventilated areas. Use mechanical ventilation if possible. If inhalation is likely then use a respirator with filter type A to Standard EN14593/4, EN405 or equivalent

### Hand Protection

Wear Butyl, PVA or polyethylene gloves to Standard EN 374 (breakthrough time for total immersion in excess of two hours).

### Eye Protection

Wear suitable eye protection such as safety glasses or goggles to Standard BS EN 166.

### Skin Protection

Wear suitable overalls or apron and change if contaminated. After contact with skin wash off immediately. Wash hands before breaks and immediately after using the product.

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## 9 - Physical & Chemical Properties

**Appearance :** Viscous red liquid

**Odour :** Characteristic solvent

**pH :** n/e

**Boiling point/range :** 80-111°C

**Melting point/range :** <0°C

**Flash point :** -9°C

**Flammability :** HIGHLY FLAMMABLE

**Autoflammability :** 515 - 535°C

**Explosive properties :** LEL 1.4%, UEL 12%

**Oxidising properties :** None

**Vapour pressure :** n/e

**Relative density :** n/e

**Solubility :** n/e

**Partition Coefficient :** n/e

**Vapour Density :** n/e

**Viscosity :** n/e

**Evaporation rate :** n/e

(n/e = not established)

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## 10 - Stability and Reactivity

### Chemical Stability

Stable at normal temperatures and under recommended storage conditions.

### Conditions to Avoid

Elevated temperature, sources of ignition and direct sunlight, acidic environments

### Materials to Avoid

Strong oxidising agents, reducing agents

### Hazardous Decomposition Products

No hazardous decomposition products when stored and handled correctly. Contact with strong acids will liberate very toxic hydrogen cyanide gas

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## 11 - Toxicological Information

### Acute toxicity

Low acute toxicity by all routes.

### Skin corrosion/irritation

Skin - Skin irritation

### Serious eye damage/eye irritation

Eyes - rabbit - Severe eye irritation

### Respiratory or skin sensitization

No data available

### Germ cell mutagenicity

No data available

### Carcinogenicity

IARC: No component of this product present (as supplied) at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### Reproductive toxicity

Damage to foetus possible. Suspected human reproductive toxicant. Inhalation: Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count). Oral: Effects on Embryo or Foetus: Foetotoxicity (except death, e.g., stunted foetus).

### Specific target organ toxicity - single exposure

No data available.

### Specific target organ toxicity - repeated exposure

No data available.

### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation. Vapours may cause drowsiness and dizziness.

**Ingestion** May be harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage.

**Skin** Harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes serious eye irritation.

### Signs and Symptoms of Exposure

Lung irritation, chest pain, pulmonary oedema. Inhalation studies on toluene have demonstrated the development of inflammatory and ulcerous lesions of the penis, prepuce, and scrotum in animals.

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## 12 - Ecological Information

### Toxicity

High concentrations may be harmful to aquatic organisms

### Persistence and degradability

Not readily biodegradable.

### Mobility in soil

Expected to be mobile.

### PBT and vPvB assessment

No data available.

### Bioaccumulative potential

No data available

### Other adverse effects

No data available.

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### 13 -Disposal Considerations

#### Product

Burn in a chemical incinerator equipped with an afterburner and scrubber. Material is classified as hazardous waste under the Hazardous Waste Regulations 2005. Contact a licensed professional waste disposal service to dispose of this material.

#### Contaminated packaging

Dispose of as unused product.

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### 14 -Transport Information

UN/SI Number: 1993

IMO: Class 3

IATA/IACO Class 3

ADR/RID Class 3

HAZCHEM/Kemler Code:

Transport Name:

Packing Group II

Packing Group II

Packing Group II

3YE/33

FLAMMABLE LIQUID, nos (Toluene/Butan-2-one solution)

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### 15 - Regulatory Information

#### Label Elements

Pictogram



Signal Word Danger

#### Hazard Statement(s)

H225 Highly flammable liquid and vapour

H361d Suspected of damaging the unborn child

H373i May cause damage to organs through prolonged or repeated exposure through inhalation

H315 Causes skin irritation

H319 Causes serious eye irritation

H336 May cause drowsiness or dizziness

#### Precautionary statement(s)

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P281 Use personal protective equipment as required.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P331 Do NOT induce vomiting.

#### Other Regulations

Health & Safety at Work etc. Act 1974

Control of Substances Hazardous to Health Regulations 2002 (as amended)

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009

Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)

EH40/2005 Workplace Exposure Limits (as amended)

Environmental Protection Act 1990

Hazardous Waste Regulations 2005 (as amended)

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## 16 - Other Information

### Text of H-code(s) and R-phrase(s) mentioned in Section 3

H225	Highly flammable liquid and vapour
H304	May be fatal if swallowed and enters airways
H361d	Suspected of damaging the unborn child
H373i	May cause damage to organs through prolonged or repeated exposure through inhalation
H315	Causes skin irritation
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
EUH066	Repeated exposure may cause skin dryness or cracking
R11	Highly flammable
R65	
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
R63	Possible risk of harm to the unborn child
R36/38	Irritating to eyes and skin
R66	Repeated exposure may cause skin dryness or cracking
R67	Vapours may cause drowsiness and dizziness

### Recommended restrictions on use

Use in accordance with manufacturer's technical instructions. Avoid contact with acids.

### Revision History

Amendment to first issue of 26/7/12. Changes to flash point in Section 9 and to PSN in section 14

### Further Information

The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Jay House Ltd. (Jay House). However, Jay House makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.