### 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Identity: MKS50 Fotomask Cleaner

Producer / Distributor : Jay House Ltd., Fiveways House, Westwells Road,

Rudloe, Corsham, Wiltshire SN13 9RG, England Tel: 01225 810596 Fax: 01225 811801

#### 2. COMPOSITION / INGREDIENT INFORMATION

This is a liquid preparation of hyrodcarbon solvents, inert resins, pigments and an oil plasticiser. The significant components are :

### **Chemical Name**

Symbol letter		R-Phrases	S-Phrases	<b>EINEC No</b>	CAS No
TOLUENE	65%				
	F, Xn	11-20	16-25-29-33	203-625-9	108-88-3
BUTANONE	35%				
	F, Xi	11-36/37	9-16-25-33	201-159-0	78-93-3

### 3. HAZARD IDENTIFICATION

EC classification :

See paragraph 15

Most important hazards: Highly flammable Harmful by inhalation

### 4. FIRST AID MEASURES

**Inhalation**: Move the victim to fresh air. Put person in half sitting position and let rest. In all cases seek medical advice

**Skin contact**: Flush with plenty of water. Remove contaminated clothing. Wash afterwards with soap and water.

**Eye contact :** Rinse eyes thoroughly with water until irritation stops. In all cases seek medical advice.

**Ingestion:** Rinse mouth with plenty of water. Give victim considerable amounts of water to drink. Do not induce vomiting. In all cases seek medical advice

Other:

Advice to physician:

### 5. FIRE-FIGHTING MEASURES

**Special Risks**: Vapour air mixture explosive.

Suitable extinguishing media Use foam, dry powder or carbon dioxide.

Unsuitable extinguishing media:-

**Special exposure hazards**: When product is involved in a fire, toxic fumes and smoke will be generated. Do not breathe these fumes

Hazardous decomposition/combustion products : Peroxides

**Protective equipment**: Use approved positive pressure self-contained breathing apparatus when product is involved in a fire.

Further instructions : Contaminated extinguishing water should be disposed of in  $\epsilon$  manner approved by the EEC, national and local regulatory agencies.

## 6. ACCIDENTAL RELEASE MEASURES

Shut off all sources of ignition warn others to keep a safe distance

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**Personal precautions**: Wear personal protective clothing. (See paragraph 8). When vapours, aerosols or mists are formed, wear suitable respiratory protection.

**Environmental precautions**: In case of an accident, avoid release of product into the environment. Prevent product getting into sewerage systems or public waterways. Try to collect as much as possible in an approved container for later disposal

Methods for cleaning up: Action may only be taken when fully protected. Contain the area of spillage. Stop the source of leak. Large amounts should be pumped into a container. Small amounts can be collected with absorbing materials. Small remaining leftovers may be washed away with large amounts of water

### 7. HANDLING AND STORAGE

# Take precautions against static discharge

**Handling**: Working areas and methods should be organised in such a way that direct contact is avoided. Wear protective clothing. Wash and eye rinse facilities must be accessible. When handling chemicals, do not eat, drink or smoke. Work directly from can do not pour into open vessels. Do not use near naked flame or sources of heat.

Fire and explosion prevention: Store in a secure area, preferably in a metal cabinet Storage requirements: Store in a dry cool, well ventilated suitable flamable liquids store, away from all sources of ignition and heating. Keep the package closed if not in use.

Larger quantities (200Litres) should be kept in purpose built stores

**Other information**: Always store in the original container. Do not use the empty contaminated container for any other purposes. Replace cap after use.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

As appropriate to quantity handled

Engineering controls: Ensure good ventilation and local exhaustion of the working

area.

**Exposure limits**: Toluene: LD50 5000 mg/kg oral, rat

Butonone: LD50 2737 mg/kg oral, rat.

Personal protection:

**Inhalation**: An extraction hood is recommended when working for extended periods.

Harmful by inhalation.

Skin contact: Wear nitrile gloves.

**Eye contact**: Wear close fitting safety goggles or face shield. **Ingestion**: When handling chemicals do not eat, drink or smoke.

Other information: Always follow the instructions. Avoid breathing mist or vapour. Avoid

contact with eyes and skin. Handle with care. Plastic aprons & gloves should be used if

handling larger quatitiies

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid, viscous

Colour : Colourless

Odour: Strong spiritBoiling point/range: 80 - 111∘ CMelting point/range: minus95 - 86∘ CFlash point: minus1∘ CFlammability: Highly flammable

Autoignition temperature: 515-5350CExplosive limitslower: 1.4%

Upper : 12%

Oxidising properties : Not determined

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Vapour pressure (20deg C) : Not determined

Density (20deg C) : Not determined

Solubility in water (25deg C) : Not determined

Solubility in other solvents (25deg C) : Completely pH value (25deg C) : Not determined pH solution in water : Not determined

Partition coefficient n-octanol/water : Not determined

Viscosity : Not determined

### 10. STABILITY AND REACTIVITY

Stability: The product is stable under normal storage conditions

Conditions to avoid :-

**Materials to avoid** - Rubber, various plastics, chloroform/ alkali hydroxides, oxidising agents

**Hazardous decomposition products**: Peroxides. When the product is involved in a fire, or when it is handled incorrectly, is there a possibility that decomposition products will be generated. ( See paragraph 5 )

### 11. TOXICOLOGICAL INFORMATION

Acute toxicity:-

Different routes of exposure, health warnings

Inhalation: Irritation in the respiratory tract. Avoid breathing mist, vapour or

aerosols. Ventilate as required to keep concentrations low

**Skin contact**: After skin contact, Irritation degreasing effect on the skin possibily followed by secondary inflammation. Danger of skin absoption after long term exposure. Dermatitus.

Eve contact: Irritation.

**Ingestion**: Vomiting, absorbtion, risk of aspiration upon vomiting. Sytemic effect. After absorbtion of large quanitities CNS disorders, inebriation, spasms, narcosis unconciousness, respiratory arrest, cardiovascular failure.

Further information: Good warning effect due to low odour threshold

**Toluene:** The information suggests a risk of embryotoxic effect must be considered probable. Pregnant women should not be exposed to this product

Evidence of mutagenic or teratogenic effects.

No evidence of carcenogenic effects

### 12. ECOLOGICAL INFORMATION

Information about elimination

Information about environmental compartments:

Ecotoxicity: LC50 23.5 mg/l inhilation, rat.

**Other information:** No environmental hazard is anticipated provided that the material is handeled and disposed of with due care and attention. When dry it forms a "plastic" skin andcan be disposed of.

### 13. DISPOSAL CONSIDERATIONS

**Product or contaminated product** Dispose of leftovers, waste or contaminated products in accordance with local and national regulations.

**Contaminated package**: Contaminated package should be disposed of in accordance with local and national regulations.

**Other information**: We recommend the separation of any waste resulting from this product. It can be dangerous when different photographic products are mixed together

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### 14. TRANSPORT INFORMATION

UN No. : -1294 Toluene 1193 Butonone Methyl-Ethyl Ketone

Description :-

Containing : - Toluene Butonone

ADR/RID **Class** : - 3,3'(b) TREMCARD: -Item :-IMDG/ADNR Class :- 3.2 Page :-**EmS** Pack.gr: - Ⅱ MFAG

ICAO/IATA Class : - 3.2 Pack.gr: - || Instr. Pass< :-

Cargo<: -Instr.

# 15. REGULATORY INFORMATION

Chemical identity: TOLUENE, BUTANONE

Warning signs EC: -

Symbol(s): F Highly flammable

> Xn Harmful Χi Irritant

R(isk) phrase(s):

R11 Highly flammable R20 Harmful by inhalation

R36/37 Irritating to eyes and respiratory system.

# S(afety) phrase(s):

Keep container in a well ventilated place S9

S16 Keep away from sources of ignition - No Smoking

S23 Do not breathe vapour Avoid contact with eyes S25 Do not empty into drains S29

S33 Take precautionary measures against static discharges

**Exposure limits**:- UK exposure limits OES Long term mg/m<sup>3</sup> 188 (SK )Toluene

OES Long term mg/m3 590 Butan-2-one

Other information :-

### 16. OTHER INFORMATION

The above mentioned information corresponds to our present knowledge and therefore does not quarantee certain properties. The safety data sheet serves as a description of the product in regards to necessary safety measures. Recipients our product must take responsibility for observing existing laws and regulations.

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