Date prepared: 27/08/2003 Date revised: No 1

# BUTANOX M-50 Resin hardener MEKP 50



ABL (STEVENS) Resin & Glass Unit 4, Millbuck Way, Springvale Industrial Estate, Sandbach, Cheshire, CW11 3HT Tel/Fax: 01270 766685

## 1. Identification of the product and the company.

Substance or preparation trade name: Methyl Ethyl Ketone Peroxide 33% in Dimethyl Phthalate

Unique reference numbers(s):

Company/undertaking name & address: As above

Telephone: 01270 766685 Emergency telephone number:

### 2. Information on ingredients

<b>U</b>				
Substance Name	Value	CAS No	Symbol R-Phrases	
Methyl ethyl ketone peroxide	>33%	1338-23-4	CE	R2-22-34-7
Dimethyl phthalate	>63%	131-11-3		
Methyl ethyl ketone Balance non hazardous	>1%	78-93-3	FXi	R11-36/37

#### 3. Hazards Identification

May cause fire. Harmful if swallowed. Causes burns.

#### 4. First aid measures

should

Symptoms and effects: Harmful if swallowed. Causes burns. Risk of serious damage to eyes.

General: Call a physician immediately.

Inhalation: Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial

respiration if there is difficulty breathing. Seek medical advice after significant

exposure.

Skin: Remove all contaminated clothing immediately. Wash off with plenty of soap

and water. Always seek medical advice. Launder clothes before reuse.

Eye: Rinse immediately and as long as possible with plenty of water. Eyelids

be held away from the eyeball to ensure thorough rinsing. Always seek

medical advice.

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Ingestion Only when conscious, rinse mouth, give plenty of water to drink (approx. 500ml).

DO NOT induce vomiting. Seek medical advice.

Advice to physician. No additional information available.

### 5. Fire fighting measures

Extinguishing media: Waterspray, foam, fire-extinguishing powder, carbon dioxide. Extinguish a small fire with

powder or carbon dioxide then apply water to prevent re-ignition.

Unsuitable extinguising media: Halones

Special exposure hazards: If involved in a fire, it will support combustion. In case of fire and/or explosion do not breathe

fumes

Hazardous decomposition/ Carbon Dioxide, Water, Acetic Acid, Formic Acid, Propanoic Acid, Methyl ethyl ketone

Protective equipment: Wear suitable protective clothing. Wear self contained breathing apparatus.

Other information: Cool closed containers with water.

#### 6. Accidental release measures

Personal precautions: Spill should be handled by trained personnel properly equipped with respiratory and eye

protection.

Environmental precautions: Notify authorities if liquid enters sewers or public waters.

Prevent entry to sewers and public waters.

Methods for cleaning: Clean up any spills as soon as possible, using an absorbent material to collect it, use suitable

disposable containers

### 7. Handling and storage

contact

be avoided

Handling: Never weigh out in the storage room. Keep product and emptied container away from heat and

sources of ignition. No sparking tools should be used. Avoid shock and friction Confinement must be avoided. Do not pipet by mouth. Do not inhale. Never bring peroxide into direct with accelerator during processing. Weigh out and add peroxide and accelerator separately.

Fire and explosion: Use explosion protected equipment Keep away from sources of ignition. No smoking.

The did expression.

Storage requirements: Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps). Store in accordance with local/national

regulations. Store in a dry, well-ventilated place away from sources of heat and direct sunlight Do not mix with peroxide accelerators. Do not mix with reducing agents. Keep container tightly closed in a cool, well-ventilated place. Keep container upright to prevent leakage. Confinement must

Other information: When using do not eat, drink or smoke. Wash thoroughly after handling. Keep working

clothing separate and do not take them home.

#### 8. Exposure Controls / Personal protection

Engineering controls :Ensure good ventilation and local exhaustion of the working area. Explosion proof

ventilation recommended.

Exposure limits: Methyl ethyl ketone peroxide OES-STEL 1 5 mg/m<sup>3</sup>

Methyl ethyl ketone QES-TWA 600.0 ing/in³ Can be absorbed through skin

OES-STEL 899 Omg/m<sup>3</sup> Can be absorbed through skin.

Personal protection:

Respiratory: Do not breathe vapour. Ensure good ventilation and local exhaustion of the working area.

Hand: Wear suitable protective gloves of neoprene or synthetic rubber. Eye: Wear eye/face protection. A face shield is preferred over goggles.

Skin and body: Wear suitable protective doming and gloves. Take off contaminated doming immediately.

Other information: Launder clothes before reuse.

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### 9. Physical and chemical properties

Appearance: Liquid
Colour: Colourless
Odour: Faint
pH value: Weak acid
Viscosity: 20 mPa.s

Solubility in water: Material partially soluble in water.

Flash point (°C): 52 (setaflash ISO 3679)

Autoignition temperature: 218°C
Density: 1180kg/m³
Peroxide content: 33%
Active oxygen content: 8.8-9%

### 10. Stability and reactivity

Stability: A dangerous self-accelerating decomposition reaction and, under certain circumstances,

explosion or fire can be caused by direct contact with incompatible substances or by thermal

decomposition at and above die following temperature: +60° C.

Conditions to avoid: Violent reactions may be expected with acid, alkali, heavy metals and reducing agents. Avoid

contact with rust. Confinement must be avoided. Do not mix with peroxide accelerators Do not

mix with reducing agents.

Materials to avoid: Use only Stainless steel 316, PVC, polyethylene or glass-lined equipment.

Hazardous decomposition products: Acetic acid. Formic acid, Propanoic acid. Methyl ethyl ketone.

Other Information: The SADT (self accelerating decomposition temperature) is an experimentally derived

temperature at which the product in a typical package will undergo self accelerating

decomposition.

#### 11. Toxicological information

Name: Methyl ethyl ketone peroxide 33%

Acute toxicity

Oral LD50: rat: 1017 mg/kg (Methyl ethyl ketone peroxide 40%)
Dermal LD50: rat: 4000mg/kg (Methyl ethyl ketone peroxide 40%)

Inhalation LD50: rat: 17 mg/1:4 hows exposure time (Methyl ethyl ketone peroxide 40%)

Irritation

Skin: Corrosive (Methyl ethyl ketone peroxide 33%)

Eyes: Severely irritating / Corrosive (Methyl ethyl ketone peroxide 33%)

Genotoxology: Ames test Not mutagenic

Name: Dimethyl phthalate. Acute toxicity

Oral LD50: rat: > 2400 mg/kg
Dermal LD50: rabbit: >10.000mg/kg
Inhalation LC50: 9300 mg/m³ (6.5 hours)

Irritation:

Skin: Moderately irritating Eyes: Minimally irritating

Name: Methyl ethyl ketone

Acute toxicity:

Oral LD50: rat: 2737 mg/kg
Dermal LC50: rabbit: 6480 mg/kg

Inhalation LC50: rat: 23.5000 mg/m

Irritation:

Skin: Moderately irritating Eyes: Moderately irritating

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12. Ecological information

Name: Based on: Methyl ethyl ketone peroxide 33%

Ecotoxicity

Fish: Acute toxicity, 96h-LC50 =44.2 mg/1. (Poecilia reticulata.)

Bacterea: Activated sludge respiration inhibition test EC50 = 48.0 mg/1

Degradable biotic: Readily biodegradable (Closed bottle test)

Name: Based on: Dimethyl phthalate

Ecotoxicity

Algea: Selenastrum capricomutum: 39.8 mg/1 (96h-IC50)

Other Info: Bio Concentration Factor (BCF) fish 5.4 (24 hours)

Name: Based on: Methyl ethyl ketone

Ecotoxicity

Fish: Lepomis macrochinis: 96h-LC50:3.22 g/1

Degradable biotic: Readily biodegradable

Other info: Naturally occurring substance

13 Disposal Considerations

Product: Probably in controlled incineration but according to local regulations. The waste should NOT

confined. Absorb die remainder with e.g. vermiculite.

Contaminated packaging: Collect for recycling or most probably controlled incineration.

Other info: Dilute before burning with organic solvents. Controlled incineration according to local

regulations is always preferred. If not possible bum in small portions on a remote place, using a

torch with a long rod to ignite the material.

14. Transport information

Hazard labels: Corrosive, Oxidising

Land transport

be

 ADR class:
 5.2
 ADR item No
 5b

 RID class:
 5.2
 RID item No:
 5b

 Trem-card
 Cefic tec ®-52G01B
 UN No:
 3105

Proper shipping name: Organic peroxide type d, liquid (Methyl Ethyl Ketone Peroxide)

Sea transport

 IMO/IMDG code:
 Page 5225a
 Class:
 5.2

 Packaging group:
 11
 UN No:
 3105

 EMS:
 5.2 - 01
 MFAG
 735

Marine pollutant: No

Proper shipping name: Organic peroxide type d, liquid (Methyl Ethyl Ketone Peroxide)

Air transport

ICAO-TI/IATA-DGR UN No: 3105 Class: 5.2 packing group: 11

Proper shipping name: Organic peroxide type d, liquid (Methyl Ethyl Ketone Peroxide)

15. Regulatory information

Symbols: Corrosive, Oxidising.

Risk phrases: R7. May cause fire.

R22. Harmful if swallowed.

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R34. Causes bums.

S Phrases: S3/7Keep container tightly closed in a cool place.

S14. Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds

(e.g. accelerators, driers, metal soaps).

S36/37/39. Wear suitable protective clothing, gloves, and eye/face protection.

S45. In case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible).

S50. Do not mix with peroxide-accelerators or (educing agents 1 (Internal assessment)

### 16. Other Information

Recommendations/restrictions:

None

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