

## SAFETY DATA SHEET

SDS No: 2 DATE

ISSUED: August 2016

This product is hazardous according to Work safe Australia.

## BUTANOX M-50 MEKP CATALYST

### 1. PRODUCT IDENTIFICATION

<b>GHS Product Identifier</b>	Butanox M-50
<b>Product Code</b>	4828212
<b>Contact Information</b>	Fiberglass (A/Asia) Sales Pty. Ltd. 2 Lincoln Street, Minto NSW 2566
<b>Phone:</b>	(02) 9820 1144
<b>Fax:</b>	(02) 9603 2314
	Emergency Phone: (02) 9820 1144 (Business Hours)
<b>Poisons Information Centre</b>	Westmead 1800 251 525 or 131126
<b>Chemcall</b>	Australia 1800 127 406 New Zealand +64-3-3530199
<b>National Poisons Centre</b>	New Zealand 0800-764 766
<b>Recommended use of the chemical and restrictions on use</b>	Curing Agent.
<b>Other Names</b>	Methyl Ethyl Ketone Peroxide. MEKP Butanox M-50
<b>Additional Information</b>	It is the user's responsibility to determine the suitability of this product for their applications and their method of use.

### 2. HAZARD IDENTIFICATION

#### GHS classification of the Substance/Mixture

Classified as hazardous according to criteria NOHSC. Classified as Hazardous according to the criteria of the New Zealand HSNO Act.

GHS Classification:

Hazardous to the Aquatic Environment – Acute Hazard: Category 3

Acute Toxicity – Dermal: Category 5

Eye Damage/Irritation: Category 1

Acute Toxicity – Inhalation: Category 4

Organic Peroxides: Type D

Skin Corrosion/Irritation: Category 1B

HSNO Approval Number: HSR002630

Haz Classes: 5.2D, 6.1E (dermal), 6.1D (Inhale/oral), 8.21B, 8.3A, 9.1D

Group Standard: Organic Peroxide, Corrosive

**Signal Word (s)**

DANGER

**Hazard Statement (s)**

H242 Heating may cause a fire

H302 Harmful if swallowed

H313 May be harmful in contact with skin.

H314 Causes severe skin burns and eye damage

H332 Harmful if inhaled.

**Pictogram (s)** H402 Harmful to aquatic life.  
Corrosion, Exclamation mark, Flame



**Precautionary Statement-Prevention** P210 Keep away from heat/sparks/open flames/hot surfaces. No Smoking.  
P220 Keep away from dirt, rust, chemicals in particular.  
P234 Keep only in original container.  
P260 Do not breathe vapour.  
P261 Avoid breathing mist vapours and sprays.  
P264 Wash hands and contaminated skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well ventilated area.  
P273 Avoid release to the environment.

**Precautionary Statement-Response** P280 Wear protective gloves eye/face protection and protective clothing.  
P301+P330+P331 If Swallowed: rinse mouth. Do NOT induce Vomiting.  
P303+P361+P353 If On Skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+P340 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTRE or a doctor/physician.  
P363 Wash contaminated cloth before reuse.  
P370+P378 In Case of fire: Use waterspray, foam, sand, dry chemical or C02 for extinction.

**Precautionary statement-Storage** P403+P235 Store in a well-ventilated place. Keep cool (below 25 °C)  
P405 Store locked up  
P420 Store away from other materials.

**Precautionary statement-Disposal** P501 Dispose of contents and container according to local regulations.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Composition information on ingredients** Methyl ethyl ketone peroxide, solution in dimethyl phthalate.

<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
Dimethyl phthalate	131-11-3	55 -70 %
Methyl ethyl ketone Peroxide	1338-23-4	30-37 %
Methyl ethyl ketone	78-93-3	1-5 %
Water	7732-18-5	1-3 %

### 4. FIRST-AID MEASURES

**First Aid Measures** Call a physician immediately. You should call a doctor or Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. Have the safety Data Sheet with you when you call.

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Oxygen may additionally be given, by trained personnel, if it is available. Get medical attention immediately.

**Ingestion** Do not induce vomiting. Get medical attention immediately by calling a physician or a poison control centre. If victim is conscious and alert, give a cup of water. Never give anything by mouth to an unconscious or convulsing person. If vomiting occurs, the patient should lie on their left side while vomiting to reduce the risk of aspiration.

- Skin** Immediately start continuous flushing of skin with water for at least 15 minutes, while removing contaminated clothing and shoes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean or destroy contaminated shoes.
- Eye Contact** Immediately start continuous flushing of eye with water for at least 15 minutes. If easy to do, contact lenses should be removed during the flushing by trained personnel. Hold the eyelids apart during the flushing to ensure rinsing the entire surface of the eye and lids with water. Get medical attention immediately.

**Indication of immediate medical attention and special treatment need if necessary.**

Persons with pre-existing skin, eye or respiratory disease may be at increased risk from the irritant or allergic properties of this material. This material is severely corrosive to the eyes and may cause delayed keratitis. The normally prescribed 15 minutes eye irrigation after exposure may be difficult because of severe pain. The prior installation of a topical ocular anaesthetic is essential to facilitate a comprehensive ocular lavage. If swallowed, do not induce vomiting. Give patient plenty of water to drink. Ingestion of this corrosive material may result in severe ulceration, inflammation and possible perforation of the upper alimentary tract, with haemorrhage and fluid loss. Aspiration of this material during induced emesis can result in severe lung injury. Contact a Poison Control centre for additional treatment information. Treat any additional effects symptomatically.

**Most important symptoms/effects, acute and delay**

Harmful if swallowed. Causes burns. Causes injury to the cornea and eyelids. Risk of serious damage to eyes.

## 5. FIRE FIGHTING MEASURES

- Fire Fighting Measures** Evacuate all non-essential personnel. Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition. Cool closed containers with water. Water used to extinguish a fire should not be allowed to enter the drainage system or water courses. After a fire, ventilate thoroughly the area and soak with water, clean the wall and metallic surfaces.
- Suitable Extinguishing Media** Water spray, alcohol-resistance foam, sand, dry chemical powder, CO<sub>2</sub>.
- Unsuitable Extinguishing Media** Halons.
- Hazards From Combustion Products** CO<sub>2</sub>, carbon monoxide, acetic acid, formic acid, propanoic acid, methyl ethyl ketone.
- Specific Hazards Arising From The Chemical** Caution: re-ignition may occur. Decomposition under effect of heating. If involved in a fire, it will support combustion. Vapours may form explosive mixtures with air. In case of fire and/or explosion do not breathe fumes.
- Hazchem Code** 2WE

## 6. ACCIDENTAL RELEASE MEASURES

- Methods And Materials For Containment And Cleaning Up** Stop leakage if possible. Eliminate all sources of ignition and do not generate flames or sparks. Transfer remaining product from leaking container to a clean and suitable container. Cover the remaining product from leaking container or a clean and suitable container. Cover the remainder with inert absorbent (e.g. vermiculite) for disposal. Keep contents moist. The waste should NOT be confined. Flush surroundings with large amounts of water and soap.
- Personal Precautions** Do not breathe fumes/vapours. Avoid contact with the eyes. For personal protection, see section 8.
- Environmental Precautions** Do not allow to enter drains or water courses.
- Other Information** CAUTION: re-ignition may occur. Vapours are heavier than air and may spread along floors. Vapour may travel to a source of ignition and flash back.

**7. HANDLING AND STORING**

**Methods & Materials for Containment & Cleaning Up** Store in a cool dry well ventilated area away from sources of direct sunlight, Keep containers tightly closed at all times. When using do not eat, drink or smoke. Keep container upright to prevent leakage. Containment must be avoided. Keep away from reducing agents e.g. amines, acids, alkalis, heavy metal compounds (e.g. accelerators, driers, metal soaps). Never weigh out in the storage room.

**Conditions For Safe Storage, Including any incompatibilities** Store in accordance with local/national regulations. Keep product-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 in direct contact with accelerator during processing. Weigh out peroxide and accelerator separately.

**Storage Temperatures** For maximum quality, store below 25°C.

**Additional information On Precautions For Use** Fire and explosion prevention: Use explosion protected equipment. Keep away from sources of ignition- No Smoking. Use non-sparking tools in areas where explosive vapour/air mixture may occur. Do not cut or weld on or near this container even when empty.

**Other Information** It is recommended to use electrical equipment of temperature group T3. However, auto-ignition can never be excluded. Wash hands thoroughly after handling or contact. Keep working clothing separately and do not take them home.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Controls, personal Protection** The following Australian and New Zealand standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: AS/NZS 1715, Protective Gloves: AS 2161, Industrial clothing: AS2919, Industrial eye protection: AS1336 and AS/NSZ 1337, Occupational Protective Footwear: AS/NZS2210.

Occupational Exposure Limit Values	<u>Name</u>		<u>STEL</u>		<u>TWA</u>
	<u>mg/m3</u>	<u>ppm</u>	<u>mg/m3</u>	<u>ppm</u>	<u>Footnote</u>
Dimethyl phthalate			5		
Methyl ethyl Ketone Peroxide			1.5	0.2	Peak limitation
Methyl ethyl Ketone	890	300	445	150	

**Appropriate Engineering Controls** Ensure good ventilation and local exhaustion of the work area. Explosion proof ventilation recommended.

**Respiratory Protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Eye Protection** Wear eye/face mask.

**Hand Protection** Wear suitable protective gloves of neoprene or synthetic rubber.

**Body Protection** Wear suitable protective clothing.

**Other Information** Emergency shower and facilities for rinsing eyes must be accessible. Launder clothes before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Form</b>	Liquid
<b>Appearance</b>	Clear, Colourless.
<b>Odour</b>	Faint.
<b>Freezing Point</b>	Not Determined.
<b>Boiling Point</b>	Not Applicable-decomposes.
<b>Solubility In Water</b>	Partly miscible.
<b>Solubility In Organic Solvent</b>	Miscible with phthalates.
<b>Specific Gravity</b>	1.18 at 20°C

<b>pH</b>	Slight acidic.
<b>Vapour Pressure</b>	0.10 kPa at 84°C
<b>Coefficient</b>	Not Determined.
<b>Water/Oil Distr. Viscosity</b>	24mPa.s at 20°C.
<b>Volatile Component</b>	5%
<b>Flash Point</b>	Above the SADT Value.
<b>Flammability</b>	Decomposition products may be flammable.
<b>Auto Ignition Temperature</b>	Test method not applicable (see Section7).
<b>Flammable Limits-Lower</b>	Not determined.
<b>Flammable Limits Unner</b>	Not determined.
<b>Explosion Pronerties</b>	No
<b>Oxidising Pronerties</b>	Not applicable.
<b>Other Information</b>	Peroxide content: 36
<b>Active oxvgen content:</b>	9.8 - 10.0
<b>SADT:</b>	60°C See also Section 10

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	SADT - (Self accelerating decomposition temperature) is the lowest temperature at which self accelerating decomposition may occur with a substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at and above the following temperature: 60°C. Contact with incompatible substances can cause decomposition at or below the SADT. To maintain quality store in original closed container below: 20°C.
<b>Conditions to Avoid</b>	Confinement must be avoided.
<b>Incompatible Materials</b>	Avoid contact with rust, iron and copper. Contact with incompatible materials such as acids, alkalies, heavy metals and reducing agents will result in hazardous decomposition. Do not mix with peroxide accelerators. Use only stainless steel 316, PP, polyethylene or glass-lined equipment. Acetic acid, formic acid, propanoic acid, methyl ethyl ketone.
<b>Hazardous Decom position Products</b>	Will not occur.
<b>Hazardous Polymerization</b>	

## 11. TOXICOLOGICAL INFORMATION

<b>Toxicology Information</b>	No experimental toxicological data of the product as such available. The following data are applicable to the ingredient(s) listed below: Dimethyl phthalate: Oral LDSO, rat: >2400 mg/kg Dermal LDSO, rat: >10000 mg/kg Inhalation LCSO, rat: 9300 mg/m <sup>3</sup> (6.5 hours) Skin irritation: Mildly irritating. Eye irritation: Minimally irritating. Methyl ethyl ketone peroxide, 40 in Dimethyl phthalate: Oral LDSO, rat: 1017 mg/kg Dermal LDSO, rat: 4000 mg/kg Inhalation LCSO, rat: 17 mg/l; 4 hours exposure time Skin irritation: Corrosive. Eye irritation: Corrosive. Sensitisation: Not sensitising. Genotoxicity: Ames test: not mutagenic Methyl ethyl ketone:
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Oral LDSO, rat: 2737 mg/kg  
Dermal LDSO, rabbit: 6480 mg/kg  
Inhalation LCSO, mouse: 23S00ppm  
Skin irritation: Moderately irritating  
Eye irritation: Moderately irritating

## 12. ECOLOGICAL INFORMATION

**Ecological Information** No experimental ecological data are available on the preparation as such. The following data are applicable to the ingredient(s) listed below: Dimethyl phthalate:  
LCSO Fish (*Lepomis macrochirus*), 96h: 420 ppm  
ICSO Algae (*Selenastrum capricornutum*), 96h: 39.8 mg/l  
Fate: Degradation Biotic - readily biodegradable  
Bio Concentration Factor (BCF) fish 5.4 (24 hours)  
Methyl ethyl ketone peroxide, 40 in Dimethyl phthalate:  
LCSO Fish (*Poecilia reticulata*), 96h: 44.2 mg/l  
ECSO - Activated sludge respiration inhibition test = 48.0 mg/l  
Fate: Degradation Biotic - readily biodegradable (closed bottle test)  
Methyl ethyl ketone:  
LCSO Fish (*Lepomis macrochirus*), 96h: 3.22 g/l  
Fate: Degradation Biotic - readily biodegradable  
Naturally occurring substance.

## 13. DISPOSAL CONSIDERATIONS

**Disposal Considerations** Dispose of waste according to applicable local, state and federal regulations.  
**Product Disposal** Due to the high risk of contamination recycling/recovery is not recommended.  
**Disposal** Waste disposal in accordance with regulations (most probably controlled incineration).  
**Container Disposal** According to local regulations. Emptied container might retain product residues. Follow all warnings even after the container is emptied.

## 14. TRANSPORT INFORMATION

**U.N. Number** 3105  
**UN proper shipping name** ORGANIC PEROXIDE TYPE D, LIQUID - Methyl ethyl ketone peroxide  
**Transport hazard class(es)** 5 • 2  
**Hazchem Code** 2WE  
**EPG Number** 5KI  
**IERG Number** 32  
**IMO Marine Pollutant** No.  
**IMDG EMS** F-J, S-R  
**Other Information** Dangerous Goods of Class 5.2 Organic Peroxides are incompatible in a placard load with any of the following: - Class 1, Class 2, Class 3, Class 4, Class 5.1, Class 7, Class 8, Fire risk substances and combustible liquids.

## 15. REGULATORY INFORMATION

**Poisons Schedule** S5  
**Symbol** C - Corrosive  
**Hazard Category** o - Oxidising  
**AICS (Australia)** Harmful, Corrosive, Oxidising  
All components of this material are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

## 16. OTHER INFORMATION

**Other Information** ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition  
AICS: Australian Inventory of Chemical Substances  
ASCC: Office of the Australian Safety and Compensation Council  
CAS number: Chemical Abstracts Service Registry Number  
EPA: Environmental Protection Agency  
Hazchem Code: Emergency action code of numbers and letters that provide information to emergency services especially fire fighters  
IARC: International Agency for Research on Cancer  
NICNAS: National Industrial Notification & Assessment Scheme  
NIOSH: National Institute for Occupational Safety & Health  
NOS: Not otherwise specified  
NTP: National Toxicology Program (USA)  
OEL: Occupational Exposure Limit  
OSHA: Occupational Safety & Health Administration  
PBT: Persistent Bioaccumulative Toxic chemical  
PMCC: Pensky Martens Closed Cup  
R-Phrase: Risk Phrase  
STEL: Short Term Exposure Limit  
SUSMP: Standard for the Uniform Scheduling of Medicines & Poisons  
TWA: Time Weighted Average  
UN Number: United Nations Number  
vPvBL: Very Persistent and Very Bioaccumulative  
WEEL: Workplace Environmental Exposure Level  
WEL-TWA: Workplace Exposure Limit, Time Weighted Average

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS MSDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.