

## Material Safety Data Sheet

# MEKP NR20

**Infosafe no.** 1HK08    **Issue Date** November 2001    **Status** ISSUED by NUPLEXRE

**Classified as hazardous according to criteria of NOHSC**

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### COMPANY DETAILS

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**Company**

**Name** FGI, division of Nuplex Industries (Aust) Pty Ltd. (ACN 25 000 045 572)  
**Address** 49-61 Stephen Road BOTANY  
NSW 2019

**Emergency**

**Tel.** 1800 033 111

**Tel/Fax** Tel: (02) 9666 0331 Fax: (02) 9666 6661

**Other**

**Information**

SYDNEY: 14 Clearview Place, Brookvale NSW 2100  
Phone: (02) 9939 1399 Fax: (02) 9938 5826  
MELBOURNE: 1612-1638 Centre Road, Springvale VIC 3171  
Phone: (03) 9550 5656 Fax: (03) 9547 5179  
ADELAIDE: 1A Ashwin Parade, Torrensville SA 5031  
Phone: (08) 8234 9499 Fax: (08) 8234 9490  
PERTH: 16-18 Coulson Way, Canning Vale WA 6155  
Phone: (08) 9455 1972 Fax: (08) 9455 1012  
BRISBANE: 20 Production Street, Wacol QLD 4076  
Phone: (07) 3271 3944 Fax: (07) 3271 1399  
GOLD COAST: Unit 2/6 Ereton Drive, Labrador, QLD 4215  
Phone: (07) 5563 7771 Fax: (07) 5563 7888  
CAIRNS: 4 Liberty Street, Portsmith QLD 4870  
Phone: (070) 35 2126 Fax: (070) 35 2125  
NEW ZEALAND: Nuplex Industries Ltd.  
12 Industry Road, Penrose, Auckland  
Phone: (09) 579 2029 Fax: (09) 525 1618  
Emergency Advice (NZ): Phone: 0800 734 607

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### IDENTIFICATION

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**Product Code** F00821

**Product Name** MEKP NR20

**Proper**

**Shipping**

**Name** ORGANIC PEROXIDE TYPE D, LIQUID\* - (Methyl ethyl ketone peroxide 40%)

**Other Names** Not Available

**UN Number** 3105

**DG Class** 5.2

**Poisons**

**Schedule** S5

**Product Use** Initiator for curing polyester resins and vinyl ester resins.

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## Physical Data

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<b>Appearance</b>	Clear colourless mobile liquid.
<b>Melting Point</b>	Not applicable.
<b>Boiling Point</b>	Not applicable.
<b>Vapour Pressure</b>	50 kPa at 55°C.
<b>Specific Gravity</b>	1.15 (H <sub>2</sub> O = 1)
<b>Flash Point</b>	68°C Setflash.
<b>Flamm. Limit</b>	
<b>LEL</b>	Not determined.
<b>Solubility in Water</b>	1% miscible.

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## Other Properties

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<b>Evaporation Rate</b>	Not determined.
<b>Vapour Density</b>	Not determined.
<b>Odour</b>	Mildly pungent odour.
<b>Form</b>	Liquid
<b>Stability</b>	Decomposes very slowly at ambient temperatures to give off oxygen.
<b>Materials to Avoid</b>	Acids, alkalis, reducing agents, oxidising agents, rust, transition metals and their compounds (such as iron, copper, brass, bronze, cobalt, nickel, lead), resins, promoters, accelerators and combustible materials.
<b>Other Information</b>	Self accelerating decomposition temperature (SADT): ca 60°C.

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## Ingredients

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Ingredients	Name	CAS	Proportion
	Dimethyl phthalate	131-11-3	40-100 %
	Methyl ethyl ketone peroxide	1338-23-4	40 %
	Methyl ethyl ketone	78-93-3	0-10 %

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## HEALTH HAZARD INFORMATION

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### Health Effects

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<b>Acute - Swallowed</b>	Corrosive if swallowed. May burn mouth, gullet and stomach. If ingested (swallowed), decomposition may occur in the stomach leading to the production of oxygen gas. This may cause distension of the stomach. Ingestion could cause toxic myocarditis.
<b>Acute - Eye</b>	Corrosive. May cause damage to the cornea which may affect vision if immediate first aid action not taken. Vapour may cause irritation.
<b>Acute - Skin</b>	Corrosive. May cause delayed chemical burns. (In some cases) transient

whitening of the affected area may occur.

**Acute - Inhaled** Irritating to respiratory tract.

**Chronic** Not known.

### First Aid

**Swallowed** Immediately rinse the mouth out with water. Give water to drink. Do NOT induce vomiting. Seek medical attention without delay.

**Eye** Immediately irrigate the eye with plenty of water. Continue the irrigation for at least 15 minutes. Seek medical attention without delay.

**Skin** Wash contaminated skin thoroughly with water. Remove contaminated clothing, soak in water, then launder before re-use. Seek medical attention if signs or symptoms such as redness, swelling, blistering or irritation develop or persist.

**Inhaled** Remove from the source of exposure. If required, seek medical attention.

**First Aid Facilities** Eye wash fountains and safety showers should be easily accessible.

### Advice to Doctor

**Advice to Doctor** A case of toxic myocarditis has been reported following ingestion. If eye contact, refer to eye specialist.

### Other Health Hazard Information

### PRECAUTIONS FOR USE

Exposure Limits	Name	STEL (mgm3)	STEL (ppm)	TWA (mgm3)	TWA (ppm)	FootNote
	Dimethyl phthalate			5		
	Methyl ethyl ketone peroxide			1.5	0.2	Stel:Peak limitation
	Methyl ethyl ketone	890	300	445	150	

**Other Exposure Info.** Exposure Standards (TWA) represent the time-weighted average airborne concentration of a substance over an eight hour day, for a five day working week, over an entire working life which, according to current knowledge should neither impair the health of, nor cause undue discomfort to, nearly all workers. They are guides only and do not represent 'no effect' levels which guarantee protection to every workers.

**Eng. Controls** Ensure ventilation is adequate to maintain air concentrations below exposure standards. While good natural ventilation may be adequate in most cases, local exhaust ventilation may be required.  
All electrical equipment should conform to the requirements of AS 3000 for location of Class 1 Zone 1.

### Personal Protection

**Respirator Type (AS)** Where ventilation is not adequate, respiratory protection may be required. An approved organic vapours canister and full face shield mask should be used if

<b>1716)</b>	the atmosphere is not otherwise hazardous, e.g. oxygen deficient. Respiratory protection should comply with AS 1716 and be selected in accordance with AS 1715.
<b>Eye Protection</b>	Full face shield, chemical goggles or safety glasses should be worn at all times while handling. Eye protection should comply with AS 1337 and be selected and used in accordance with AS 1336.
<b>Glove Type</b>	PVC gloves should be worn when handling. Hand protection should comply with AS 2161.
<b>Clothing</b>	Trousers, long sleeved shirt and closed in shoes or safety footwear should be worn as a general precaution.
<b>Protective Equip.</b>	A PVC apron, rubber or PVC boots or a chemical splash suit may be required for some activities particularly where a definite risk of splashing is present.
<b>Work/Hygienic Practices</b>	Observe good standard of cleanliness and hygiene. Avoid contact with skin and eyes.

### Flammability

<b>Fire Hazards</b>	As with any organic peroxide, MEKP-NR20 is regarded as being flammable and therefore presents a fire risk.
<b>Special Protective Measures</b>	Electrical equipment should conform to the requirements of AS 3000 for location of Class 1, Zone 1. Do not use close to ignition sources. Use in a well ventilated area.

## SAFE HANDLING INFORMATION

### Storage and Transport

<b>Transport</b>	Transport in accordance with the requirements of the current Australian Code for the transport of Dangerous Goods by Road and Rail, the IMO Regulations for sea freight and the IATA Regulations for air freight.
<b>Storage Regulations</b>	Store in upright original vented container in accordance with local statutory requirements and applicable standards for Organic Peroxides. Maximum storage temperature 35°C.
<b>Special Shipping Information</b>	IMDG 5.2
<b>Proper Shipping Name</b>	ORGANIC PEROXIDE TYPE D, LIQUID* - (Methyl ethyl ketone peroxide 40%)
<b>EPG Number</b>	5K1
<b>IERG Number</b>	32

### Spills and Disposal

<b>Spills &amp; Disposal</b>	Contain spillage to prevent run-off into waterways. If possible collect spillage in clean plastic containers with vented lids. Alternatively, absorb spillage on inert material such as vermiculite, perlite or clean sand - not combustible absorbents such as sawdust. Addition of water is recommended.
<b>Disposal</b>	Contaminated material must be disposed of promptly. Disposal may be by chemical decomposition or burning of small quantities under controlled conditions. Approval may be required from relevant authorities. Consult FGI for further advice.

## Fire/Explosion Hazard

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<b>Fire/Explos. Hazard</b>	Burns fiercely when ignited. Containers involved in a fire can constitute an explosion risk if confined. Jetting of burning liquid and fireballs can also occur. Organic peroxides provide oxygen for combustion so simple smothering actions are not effective against established fires. Due to possibility of re-ignition, extinguished residues must be thoroughly cooled before approaching.
<b>Hazardous Decomposition or Byproducts</b>	Flammable gases and vapours.
<b>Fire Fighting Procedures</b>	Fight fires only from a safe distance and with adequate cover. For large fires action may need to be limited to cooling adjacent exposures with water to prevent fire spread. Explosion hazard for product under confinement includes possibility of containers 'rocketing' and production of fireballs.
<b>Extinguishing Media</b>	Large quantities of fine water spray.
<b>Hazardous Reaction</b>	Stability: Decomposes very slowly at ambient temperatures to give off oxygen. Conditions to Avoid: Exposure to direct sunlight, heat or sources of ignition and contamination. Avoid contamination with any materials. Never mix directly with accelerators or promoters. Do not confine in closed systems or equipment. Do not return unused product to original container. Incompatibility: Acids, alkalis, reducing agents, oxidising agents, rust, transition metals and their compounds (such as iron, copper, brass, bronze, cobalt, nickel, lead), resins, promoters, accelerators and combustible materials.

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## OTHER INFORMATION

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<b>Toxicology</b>	LD50 (rats) range reported 484 mg/kg to 500 mg/kg LC50 (rats - 4 hours) : 200 ppm LC50 (mice - 4 hours): 170 ppm
<b>Risk Statement</b>	R10 Flammable. R34 Causes burns. R41 Risk of serious damage to eyes. R21/22 Harmful in contact with skin and if swallowed.
<b>Safety Statement</b>	S17 Keep away from combustible material. S3/7/9 Keep container tightly closed in a cool, well ventilated place. S36/39 Wear suitable protective clothing and eye/face protection.
<b>Pkg. &amp; Labelling Hazard Category</b>	Class 5.2 labels in accordance with the Australian Code for the Transport of Dangerous Goods including Schedule 5 Poison requirements. Harmful, Corrosive

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## CONTACT POINT

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<b>Contact</b>	For further information ask for: Manager Chemicals' Handling Compliance Phone: (02) 9666 0331. For specialist advice in emergencies: Australia 1800 033 111; New Zealand 0800 734 607. Nuplex Industries make no representation as to the completeness and accuracy of the data contained in this data sheet. It is the user's obligation to evaluate and use this product safely, and to comply with all relevant Federal, State and Local Government laws and regulations. Nuplex Industries shall not be responsible for loss, damage or injury resulting from reliance upon or failure to adhere to any recommendations or information contained herein, from abnormal use of the material, or from any hazard inherent in the nature of the material.
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End of MSDS

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