

**nuplex** Material Safety Data Sheet**MEK SOLVENT**

**Infosafe No.** ACOLO **Version** 3.1 **ISSUED** August **Status** ISSUED  
**No.** **Date** 2013 by  
NUPLEXIN

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**1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

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**Product Name**

MEK SOLVENT

**Product Code**

C631727

**Company Name**

NUPLEX SPECIALTIES a division of Nuplex Industries (Aust) Pty Ltd (ABN 25 000 045 572)

**Address**

49 - 61 Stephen Road, BOTANY NSW 2019  
New Zealand: NUPLEX SPECIALTIES NZ Limited, Level 3 Millennium Centre, 602C Great South  
Road Ellerslie 1051  
NEW ZEALAND

**Emergency Tel.**

Australia: 1800 022 037 (24H)  
New Zealand: 0800 154 666 (24H)

**Telephone/Fax Number**

Telephone: Australia: +61 (02) 9839 4000(BH); New Zealand: +64 (09) 583 6500(BH) Fax  
number: Australia: +61 (02) 9674 6225; New Zealand: +64 (09) 525 3709

**Email**

compliance@nuplex.com.au

**Recommended Use**

Solvent

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**2. HAZARDS IDENTIFICATION**

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**Hazard Classification**

Classified as Hazardous according to criteria of National Occupational Health and Safety  
Commission (NOHSC), Australia.

Classified as Dangerous Goods according to the Australian Code for the Transport of  
Dangerous Goods by Road and Rail. (7th edition)

**Risk Phrase(s)**

R11 Highly flammable.  
R36 Irritating to eyes.  
R66 Repeated exposure may cause skin dryness or cracking.  
R67 Vapours may cause drowsiness and dizziness.

**Safety Phrase(s)**

S9 Keep container in a well-ventilated place.  
S16 Keep away from sources of ignition - No smoking.  
S23 Do not breathe gas/fumes/vapour/spray  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

S24/25 Avoid contact with skin and eyes.

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

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### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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#### Chemical Characterization

Liquid

#### Ingredients

Name	CAS	Proportion
Methyl ethyl ketone	78-93-3	100 %

#### Preparation Description

Methyl Ethyl Ketone

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### 4. FIRST AID MEASURES

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#### Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

#### Ingestion

Do NOT induce vomiting. Wash out mouth thoroughly with water. Seek medical attention.

#### Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse. Seek medical attention.

#### Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.

#### First Aid Facilities

Eyewash, safety shower and normal washroom facilities.

#### Advice to Doctor

Treat symptomatically.

#### Other Information

For advice in an emergency, contact a Poisons Information Centre or a doctor at once.  
( 131 126 )

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### 5. FIRE FIGHTING MEASURES

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#### Suitable Extinguishing Media

Carbon dioxide, dry chemical, foam, water fog or water mist.

#### Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, carbon dioxide and oxides of nitrogen.

#### Specific Hazards

Highly flammable liquid and vapour. Shut off any leak if safe to do so and remove sources of re-ignition. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. However heating can cause expansion or decomposition leading to violent rupture of containers. Runoff to sewer may create fire or explosion hazard. Vapour is heavier than air and will tend to accumulate in hollows or sumps.

**Hazchem Code**

•2YE

**Decomposition Temperature**

Not available

**Precautions in connection with Fire**

Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. Eliminate all ignition sources if safe to do so. This product should be prevented from entering drains and watercourses.

**Unsuitable Extinguishing Media**

Do not use water jet.

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## 6. ACCIDENTAL RELEASE MEASURES

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**Emergency Procedures**

Extinguish or remove all sources of ignition and stop leak if safe to do so. Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

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## 7. HANDLING AND STORAGE

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**Precautions for Safe Handling**

Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Work from suitable, labelled, fire-resistant containers. Open containers carefully as they may be under pressure. Keep containers tightly closed. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities.

**Conditions for Safe Storage**

Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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**National Exposure Standards**

Substance	Regulations	Exposure Duration	Exposure Limit	Units	Notes

Methyl ethyl ketone	Safe Work Australia	TWA	150	ppm
	Safe Work Australia	TWA	445	mg/m3
	Safe Work Australia	STEL	300	ppm
	Safe Work Australia	STEL	890	mg/m3

#### Biological Limit Values

Name: Methyl Ethyl Ketone

Determinant: MEK

Specimen: urine

Value: 2 mg/L

Sampling time: end of shift.

Source: American Conference of Industrial Hygienists (ACGIH)

#### Engineering Controls

Provide sufficient ventilation to keep airborne levels below the exposure limits or as low as possible. Where vapours or mists are generated, particularly in enclosed areas, and natural ventilation is inadequate, a flameproof exhaust ventilation system is required. Refer to AS1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1:2009 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

#### Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Final choice will vary according to individual circumstances. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

#### Eye Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken.

Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

#### Hand Protection

Wear gloves of impervious material such as laminated film and PVC. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

#### Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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#### Form

Liquid

#### Appearance

Water white liquid

**Odour**

Strong ketonic odour

**Decomposition Temperature**

Not available

**Melting Point**

-86°C

**Boiling Point**

80°C

**Solubility in Water**

29g/100 mL

**Specific Gravity**

0.80 (20°C)

**pH Value**

Not available.

**Vapour Pressure**

89hPa (20°C)

**Vapour Density (Air=1)**

2.40 (20°C)

**Evaporation Rate**

3.70

**Odour Threshold**

Not available.

**Viscosity**

Refer to Section 9: kinematic viscosity, dynamic viscosity

**Colour**

Water white

**Volatile Component**

100%

**Octanol/Water Partition Coefficient**

Not available.

**Flash Point**

- 4°C

**Flammability**

Highly flammable liquid

**Auto-Ignition Temperature**

>450°C

**Flammable Limits - Lower**

1.80% v/v

**Flammable Limits - Upper**

11.50% v/v

**Explosion Properties**

Not available

**Oxidising Properties**

Not available

**Kinematic Viscosity**

Not available.

**Dynamic Viscosity**

Not available

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## 10. STABILITY AND REACTIVITY

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**Stability and Reactivity**

Refer to Section 10: Possibility of hazardous reactions

**Chemical Stability**

Stable under normal conditions of storage and handling.

**Conditions to Avoid**

Avoid sparks, flames and other ignition sources.

**Incompatible Materials**

Strong oxidising agents, acids and bases.

**Hazardous Decomposition Products**

Thermal decomposition may result in the release of toxic and/or irritating fumes including: carbon monoxide and carbon dioxide.

**Hazardous Reactions**

Reacts with incompatible materials.

**Hazardous Polymerization**

Will not occur.

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## 11. TOXICOLOGICAL INFORMATION

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**Toxicology Information**

Toxicity data for material given below.

**Inhalation**

May cause drowsiness or dizziness. If vapours are formed inhalation may cause CNS depression with symptoms similar to those seen if product is swallowed.

**Ingestion**

Ingestion may cause CNS depression with symptoms including drowsiness, dizziness, fatigue, confusion and possible unconsciousness.

**Skin**

May be irritating to skin. The symptoms may include redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

**Eye**

Irritating to eyes. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

**Chronic Effects**

Repeated exposure may cause skin dryness or cracking.

**Acute Toxicity - Oral**

LD50 (rat):2900 mg/kg

**Acute Toxicity - Inhalation**

LC50 (rat ): 23.5-34.5 mg/L/4h

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## 12. ECOLOGICAL INFORMATION

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**Ecotoxicity**

No ecological data available for this material.

**Persistence / Degradability**

Not available

**Mobility**

Not available

**Bioaccumulative Potential**

Not available

**Environmental Protection**

Do not discharge this material into waterways, drains and sewers.

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## 13. DISPOSAL CONSIDERATIONS

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**Disposal Considerations**

Dispose of waste according to applicable local and national regulations. Controlled incineration is recommended. Contaminated containers can be re-used after cleaning.

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## 14. TRANSPORT INFORMATION

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**Transport Information**

This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

Class 1: Explosives

Division 2.1: Flammable Gases, if both the Class 3 and Division 2.1 dangerous goods are in bulk.

Division 2.3: Toxic gases

Division 4.2: Spontaneously combustible substances

Division 5.1: Oxidising substances

Division 5.2: Organic peroxides

Class 6 Toxic or Infectious Substances

Class 7: Radioactive materials unless specifically exempted

**U.N. Number**

1193

**Proper Shipping Name**

ETHYL METHYL KETONE (METHYL ETHYL KETONE)

**DG Class**

3

**Packing Group**

II

**Hazchem Code**

•2YE

**IERG Number**

14

**UN Number (Air Transport, ICAO)**

1193

**IATA/ICAO Proper Shipping Name**

METHYL ETHYL KETONE

**IATA/ICAO Hazard Class**

3

**IATA/ICAO Packing Group**

II

**IATA/ICAO Symbol**

Flammable liquid.

**IMDG UN No**

1193

**IMDG Proper Shipping Name**

METHYL ETHYL KETONE

**IMDG Hazard Class**

3

**IMDG Pack. Group**

II

**IMDG Marine Pollutant**

No

**IMDG EMS**

F-E,S-D

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## 15. REGULATORY INFORMATION

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**Regulatory Information**

Classified as Hazardous according to criteria of National Occupational Health and Safety Commission (NOHSC), Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poisons Schedule**

S5

**Hazard Category**

Irritant, Highly Flammable

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## 16. OTHER INFORMATION

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**Date of preparation or last revision of MSDS**

SDS amendment: October 2013

1. Identification of the Material and Supplier

SDS Reviewed: August 2013, Supersedes: September 2008

**Contact Person/Point**

IMPORTANT ADVICE: This MSDS summarizes 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 should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an

appropriate risk assessment can be made, the user should contact the supplier listed in section 1 of the SDS. 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.

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#### **Literature References**

Standard for the Uniform Scheduling of Medicines and Poisons.

Approved criteria for classifying hazardous substances [NOHSC:1008(2004)].

National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC:2011(2003)].

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Workplace exposure standards for airborne contaminants, Safe work Australia.

American Conference of Industrial Hygienists (ACGIH)

#### **Technical Contact Numbers**

For further information ask for: For specialist advice in emergencies: 1800 022 037

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End of MSDS

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