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| Infosafe No™ IMER9 | Issue Date : June 2015 | ISSUED by IMCDAST |
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 Product Name **Butanox LPT-IN**

Classified as hazardous

1. Identification

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| GHS Product Identifier | Butanox LPT-IN |
| Product Code | 5405885 |
| Company Name | IMCD Australia Limited (ABN 44 000 005 578) |
| Address | 1st Floor, 372 Wellington Road Mulgrave Victoria 3170 Australia |
| Telephone/Fax Number | Tel: (03)8544 3100 (Business hours) Fax: (03)8544 3299 |
| Emergency phone number | 1800 625 526 |
| Emergency Contact Address | NEW ZEALAND Emergency Response: 0800 500 288 IMCD New Zealand Limited 459 Great South Road Penrose, Auckland Ph: (09) 582 0250 Fax (09) 525 0030 |
| E-mail Address | reg@imcd.com.au |
| Recommended use of the chemical and restrictions on use | Curing agent. |
| Additional Information | It is the user's responsibility to determine the suitability of this product for their applications and their methods of use. |
| Other Information | 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 SDS 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. |

2. Hazard Identification

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| GHS classification of the substance/mixture | Classified as hazardous according to criteria of NOHSC. Classified as Hazardous according to the criteria of the New Zealand HSNO Act. Organic Peroxides: Type D Skin Corrosion/Irritation: Category 1B HSNO Approval Number: HSR002630 Haz Classes: 5.2D, 8.2C, 8.3A Group Standard: Organic Peroxides, Corrosive |
| Signal Word (s) | DANGER |
| Hazard Statement (s) | H242 Heating may cause a fire. H314 Causes severe skin burns and eye damage. |
| Pictogram (s) | Corrosion, Flame |



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| 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 vapours. P280 Wear protective gloves eye/face protection and protective clothing. |
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| Precautionary statement – Response | 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 CENTER or doctor/physician. P363 Wash contaminated clothing before reuse. P370+P378 In case of fire: Use waterspray, foam, sand, dry chemical or CO2 for extinction. |
| Precautionary statement – Storage | P403+P235 Store in a well-ventilated place. Keep cool (below 25°C). |
| Precautionary statement – Disposal | P405+P420 Store locked up. Store away from other materials. |
| Other Information | P501 Dispose of contents and container according to local regulations. |
| | PBT and vPvB assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |

3. Composition/information on ingredients

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| Composition, information on ingredients | Methyl ethyl ketone peroxide, solution in diisononyl phthalate. |
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| Ingredients | <u>Name</u> | <u>CAS</u> | <u>Proportion</u> |
|-------------|------------------------------|------------|-------------------|
| | Methyl ethyl ketone peroxide | 1338-23-4 | 30-40 % |
| | Methyl ethyl ketone | 78-93-3 | 1-<3 % |
| | di-isononyl phthalate | 28553-12-0 | Balance |

4. First-aid measures

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| First Aid Measures | Immediate medical attention is required. Move out of dangerous area. Show this safety data sheet to the doctor in attendance. |
| Inhalation | If breathed in, move person into fresh air. Consult a physician after significant exposure. |
| Ingestion | Clean mouth with water and afterwards drink plenty of water. Never give anything by mouth to an unconscious person. Take victim immediately to hospital. Do not induce vomiting! May cause chemical burns in mouth and throat. |
| Skin | Take off contaminated clothing and shoes immediately. Rinse immediately with plenty of water. Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. |
| Eye contact | Rinse with plenty of water. Get medical attention immediately. Continue rinsing eyes during transport to hospital. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. Small amounts splashed into eyes can cause irreversible tissue damage and blindness. |
| Indication of immediate medical attention and special treatment needed if necessary | Treat symptomatically. |
| Most important symptoms/effects, acute and delayed | The symptoms and effects are as expected from the hazards as shown in Section 2. No specific product related symptoms are known. |

5. Fire-fighting measures

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| Fire Fighting Measures | In the event of fire, wear self-contained breathing apparatus. Use water spray to cool unopened containers. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. |
| Suitable extinguishing media | Waterspray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| Unsuitable Extinguishing Media | High volume water jet. |

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| Hazards from Combustion | Fire will produce smoke containing hazardous combustion products (see Section 10). |
| Products | |
| Specific hazards arising from the chemical | CAUTION: reignition may occur. Supports combustion. Do not use a solid water stream as it may scatter and spread fire. Water spray may be ineffective unless used by experienced firefighters. Heating may cause decomposition with release of toxic fumes. Do not allow run-off from fire fighting to enter drains or water courses. |
| Hazchem Code | 2WE |
| Decomposition Temp. | 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. |

6. Accidental release measures

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| Methods and materials for containment and cleaning up | Methods for cleaning up: Keep wetted with water. Methods for containment: Soak up with inert absorbent material and dispose of as hazardous waste. Confinement must be avoided. Never return spills in original containers for re-use. |
| Personal Precautions | Use personal protective equipment (See Section 8). Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. |
| Environmental Precautions | Prevent product from entering drains. If the product contaminates rivers and lakes or drains, inform relevant authorities. |
| Other Information | See Section 8 for information on appropriate personal protective equipment. |

7. Handling and storage

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| Precautions for Safe Handling | For personal protection see Section 8. Smoking, eating and drinking should be prohibited in the application area. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage, including any incompatibilities | No smoking. Electrical installations/working materials must comply with the technological safety standards. Keep only in the original container. Store away from other materials. No decomposition if stored and applied as directed. |
| Storage Temperatures | For maximum quality, store below 25°C. |
| Additional information on precautions for use | Advice on protection against fire and explosion: Use explosion protected equipment. Keep away from sources of ignition - No smoking. No sparking tools should be used. Keep away from reducing agents (e.g. amines), acids, alkalies and heavy metal compounds (e.g. accelerators, driers, metal soaps). Do not cut or weld on or near this container even when empty. Keep away from combustible material. Temperature class : It is recommended to use electrical equipment of temperature group T3. However, autoignition can never be excluded. |
| Other Information | It is recommended to use electrical equipment of temperature group T3. However, autoignition 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

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| 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/NZS 1337, Occupational Protective Footwear: AS/NZS2210. |
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| Occupational exposure limit values | <u>Name</u> | | <u>STEL</u> | | <u>TWA</u> | | <u>Footnote</u> |
|------------------------------------|--------------|------------|--------------|------------|------------|--|-----------------|
| | <u>mg/m3</u> | <u>ppm</u> | <u>mg/m3</u> | <u>ppm</u> | | | |
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| Occupational exposure limit values | <u>Name</u> | STEL | | TWA | | <u>Footnote</u> |
|---|---|--------------|------------|--------------|------------|-----------------|
| | | <u>mg/m3</u> | <u>ppm</u> | <u>mg/m3</u> | <u>ppm</u> | |
| | Methyl ethyl ketone peroxide | | | 1.5 | 0.2 | Peak limitation |
| | Methyl ethyl ketone | 890 | 300 | 445 | 150 | |
| Appropriate engineering controls | Explosion proof ventilation recommended. Effective exhaust ventilation system. Ensure that eyewash stations and safety showers are close to the workstation location. | | | | | |
| Respiratory Protection | In the case of vapour or aerosol formation use a respirator with an approved filter. Filter A | | | | | |
| Eye Protection | Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems. | | | | | |
| Hand Protection | Butyl-rubber. Neoprene gloves. | | | | | |
| Body Protection | Protective suit. | | | | | |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the day. | | | | | |
| Other Information | Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities. | | | | | |

9. Physical and chemical properties

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| Form | Liquid |
| Appearance | Colourless. |
| Odour | Faint. |
| Decomposition Temperature | 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. |
| Melting Point | No data available. |
| Freezing Point | No data available. |
| Boiling Point | Decomposes below the boiling point. |
| Solubility in Water | Immiscible |
| Solubility in Organic Solvents | Miscible with phthalates. |
| Specific Gravity | 1.012 at 20°C |
| pH | Not determined. |
| Vapour Pressure | Not determined. |
| Coefficient Water/Oil Distr. | Not determined. |
| Odour Threshold | No data available. |
| Volatile Component | Not determined. |
| Flash Point | Above the SADT value. |
| Flammability | Decomposition products may be flammable. |
| Auto-Ignition Temperature | Test method not applicable (see Section 7). |
| Flammable Limits - Lower | Not determined. |
| Flammable Limits - Upper | Not determined. |
| Explosion Properties | Not explosive. |

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| Oxidising Properties | Not classified as oxidising. |
| Kinematic Viscosity | 32.02 mm ² /s at 20°C |
| Dynamic Viscosity | 32.4mPa.s at 20°C |
| Other Information | Active oxygen content: 8.4 - 8.5% Peroxide content: 30 - 37% SADT: 60°C See also Section 10 |

10. Stability and reactivity

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| Reactivity | Stable under normal conditions. |
| Chemical Stability | Stable under recommended storage conditions. 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. |
| Conditions to Avoid | Heat, flames and sparks. Confinement must be avoided. |
| Incompatible Materials | Rust, iron and copper. Contact with 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. |
| Hazardous Decomposition Products | Oxides of carbon. Acetic acid, formic acid, propionic acid, methyl ethyl ketone. |
| Hazardous Polymerization | Will not occur. |

11. Toxicological Information

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| Toxicology Information | <p>Diisononyl phthalate:</p> <p>Oral LD50, rat: >5000 mg/kg Skin irritation: Non-irritating. Eye irritation: Non-irritating.</p> <p>Methyl ethyl ketone peroxide, 40% in Dimethyl phthalate:</p> <p>Oral LD50, rat: 1017 mg/kg Dermal LD50, rat: 4000 mg/kg Inhalation LC50, rat: 17 mg/l; 4 hours exposure time Skin irritation: Causes burns. Eye irritation: Risk of serious damage to eyes. Sensitisation: Not sensitising. Genotoxicity: Ames test: not mutagenic Reproductive toxicity/Fertility: Species: Rat, male and female, Application Route: oral, Dose: 0, 25, 50, 75 milligram per kilogram, General Toxicity - Parent: No observed adverse effect level: 50 mg/kg bw/day, General Toxicity F1: No observed adverse effect level F1: 50 mg/kg bw/day, Fertility: No observed adverse effect level Parent : 75 mg/kg bw/day, Method: OECD Test Guideline 421 GLP: yes Target Organ Systemic Toxicant - Repeated exposure: The substance or mixture is not classified as specific target organ toxicant, repeated exposure. Aspiration toxicity : No aspiration toxicity classification</p> <p>Methyl ethyl ketone:</p> <p>Oral LD50, rat: 2737 mg/kg Dermal LD50, rabbit: 6480 mg/kg Inhalation LC50, mouse: 23500ppm Skin irritation : Result: Repeated exposure may cause skin dryness or cracking. Moderately irritating. Eye irritation : Result: Irritating to eyes. Target Organ Systemic Toxicant - Single exposure : Exposure routes: Inhalation. The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects. Aspiration toxicity: No aspiration toxicity classification</p> |
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| Acute Toxicity - Oral | Acute toxicity estimate: >2000 mg/kg |
| Acute Toxicity - Inhalation | Acute toxicity estimate: >20 mg/L (vapour, 4h) |
| Ingestion | Causes burns. May be harmful if swallowed. |
| Inhalation | Inhalation of aerosols may cause irritation to mucous membranes. Thermal decomposition can lead to release of irritating gases and vapours. |
| Skin | Symptoms may be delayed. Causes severe burns. |
| Eye | Causes serious eye damage. |

12. Ecological information

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| Ecological Information | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life. Di-isononyl phthalate: EC50 Daphnia magna, 48h: >500 mg/l EC50, algae, 72h: >500 mg/l Fate: Degradation Biotic - readily biodegradable Methyl ethyl ketone peroxide, 40% in Dimethyl phthalate: LC50 Fish (Poecilia reticulata), 96h: 44.2 mg/l EC50 - Activated sludge respiration inhibition test = 48.0 mg/l Fate: Degradation Biotic - readily biodegradable (closed bottle test) Methyl ethyl ketone: LC50 Fish (Lepomis macrochirus), 96h: 3.22 g/l Fate: Degradation Biotic - readily biodegradable Naturally occurring substance. |
| Persistence and degradability | No information available. |
| Mobility | No information available. |
| Bioaccumulative Potential | No information available. |
| Other Adverse Effects | No information available. |

13. Disposal considerations

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| Disposal Considerations | Dispose of waste according to applicable local, state and federal regulations. |
| Product Disposal | The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Hazardous waste. Dispose of contents/container to an approved waste disposal plant. |
| Container Disposal | Empty remaining contents and dispose of as unused product. Do not burn or use a cutting torch on the empty drum. Due to the high risk of contamination recycling/recovery is not recommended. Follow all warnings even after the container is emptied. |

14. Transport information

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| Transport Information | NZS 5433:2007 Transport of Dangerous Goods on Land & Dangerous Goods Rule 2005. |
| 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 | 5K1 |
| IERG Number | 32 |
| IMDG EMS | F-J, S-R |
| Marine Pollutant | No. |

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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

Regulatory Information All components of this material are listed on or exempt from the New Zealand Inventory of Chemicals (NZIoC).

Poisons Schedule S5

HSNO Approval Number HSR002630

Hazard Category Harmful, Corrosive, Oxidising

AICS (Australia) All components of this material are listed on or exempt from the Australian Inventory of Chemical Substances (AICS).

16. Other Information

Contact An electronic version of this SDS is available at www.imcdgroup.com

Person/Point

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

BCF: Bioconcentration Factor

CAS number: Chemical Abstracts Service Registry Number

CMR: Carcinogenic, Mutagenic or toxic to Reproduction

DMEL: Derived Minimum Effect Level

DNEL: Desired NO Effect Level

EPA: Environmental Protection Agency

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

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

IOELV: Indicative Occupational Exposure Limit Value

LC50: Lethal Concentration, 50 percent

LD50: Lethal Dose, 50 percent

NICNAS: National Industrial Notification & Assessment Scheme

NIOSH: National Institute for Occupational Safety & Health

NOAEL: No Observed Adverse Effect Level

NOEC: No Observed Effect Concentration

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

PNEC: Predicted No Effect Concentration

R-Phrase: Risk Phrase

STEL: Short Term Exposure Limit

STOT-SE: Specific Target Organ Toxicity (Single Exposure)

STOT-RE: Specific Target Organ Toxicity (Repeated Exposure)

SUSMP: Standard for the Uniform Scheduling of Medicines & Poisons

TWA: Time Weighted Average

UN Number: United Nations Number

vPvB: Very Persistent and Very Bioaccumulative

WEEL: Workplace Environmental Exposure Level

WEL-TWA: Workplace Exposure Limit, Time Weighted Average

...End Of MSDS...

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