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Butanox LPT

1. Product and Company identification

Trade Name:	Supplier:	Manufacturer:
Butanox LPT	ALFA LAVAL Tumba AB	Akzo Nobel Polymer Chemicals bv
	Hans Stares väg	Stationsplein 4
	SE-147 80 Tumba	PO Box 247
e-mail	sds.question@alfalaval.com	
Product Type:		
Curing Agent	Sweden	NL-3800 AE Amersfoort
	Tel: +46 8 53 06 50 00	Tel: +31 33 46 76 767
Emergency number: +46 (0)8-33 70 43 open 24h		

2. Hazard Identification

Risk of explosion by shock, friction, fire or other sources of ignition.
 May cause fire.
 Harmful if swallowed.
 Causes burn.

3. Composition and Information on the Components

For explanation of R-phrases see section 16.

Hazardous ingredient	Weight-%	Ec No	CAS No	Classification	Risk Phrases
Methyl ethyl ketone peroxide	35	215-661-2	1338-23-4	C, E	R02 R22 R34 R07
Diisobutyl phthalate	60	201-553-2	84-69-5		
Methyl ethyl ketone	2	201-159-0	78-93-3	F, Xi	R11 R36 R66 R67

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4. First Aid Measurements

Symptoms and effects	Harmful if swallowed. Causes burn. Causes injury to the cornea and eyelids. Risk of serious damage to eyes. Call a physician immediately.
Inhalation	Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial respiration if there is difficulty in breathing. Remove contaminated clothing. Always seek medical attention.
Skin	Remove all contaminated clothing immediately. Wash off with plenty of soap and water. Launder clothes before reuse. Always seek medical advice
Eye	Rinse immediately with tepid water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Continue the rinse during the transport to hospital. Always seek medical advice.
Ingestion	Rinse mouth with water. Do NOT induce vomiting. Call a physician immediately!
Advice to physician	Bring this MSDS to the physician. Symptomatic treatment is advised.

5. Fire Fighting Measurements

Extinguishing media	Carbon dioxide, dry chemical powder, dry sand, water, foam.
Unsuitable extinguishing media	Halones.
Special exposure hazards	CAUTION: re-ignition may occur. Decomposition under effect of heating. If involved in a fire, it will support combustion. In case of fire and/or explosion do not breathe fumes.
Hazardous decomposition/ combustion products	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	Extinguish a small fire with powder or carbon dioxide then apply water to prevent re-ignition. Cool closed containers with water.

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6. Accidental Release Measures

Personal precautions	Do not breathe fumes/vapor. Avoid contact with skin and eyes. For personal protection, see section 8.
Environmental precautions	Do not allow entering drains or watercourses.
Methods for cleaning up	Collect as much as possible in a clean container for (preferable) reuse or disposal. Cover the remainder with inert absorbent (e.g. vermiculite) for disposal. Keep contents moist. The waste should NOT be confined.
Other information	CAUTION: re-ignition may occur.

7. Handling and Storage

Handling	Never weigh out in the storage room. When using do not eat, drink or smoke. Do not pipette by mouth. Do not breathe fumes/vapor. Handle in well ventilated areas. Keep away from reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps). Keep product and emptied container away from heat and sources of ignition. Confinement must be avoided. Avoid shock and friction. Avoid contact with skin and eyes.
Fire and explosion prevention	Use explosion-protected equipment. Keep away from sources of ignition - No smoking. Vapors are heavier than air and may spread along floors.
Storage requirements	Store in accordance with local/national regulations. Keep away from food, drink and animal feeding stuffs. Store in a dry well ventilated place away from sources of heat and direct sunlight. Keep only in the original container. For maximum quality store below 25°C. Keep container upright to prevent leakage.
Other information	It is recommended to use electrical equipment of temperature group T3. Wash hands thoroughly after handling or contact. Keep working clothing separately and do not take them home.

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8. Exposure Control / Personal Protection

Engineering controls	Explosion proof ventilation recommended. Ensure good ventilation and local exhaustion of the working area.
Exposure limits	Methyl ethyl ketone peroxide: OES-STEL 1.5 mg/m ³ Diisobutyl phthalate: OES-TWA 5.0 mg/m ³ Methyl ethyl ketone: OES-TWA 300 mg/m ³ . Can be absorbed through skin.
Respiratory protection	Do not breathe vapors! In case of insufficient ventilation wear suitable respiratory equipment (respirator with Filter A).
Hand protection	Wear suitable protective gloves of neoprene or synthetic rubber.
Eye protection	Wear eye/face protection. A face shield is preferred over goggles.
Skin and body protection	Wear suitable protective clothing.
Other information	Launder clothes before reuse.

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9. Physical and Chemical Properties

Appearance	Liquid.
Colour	Clear and colorless.
Odour	Faint.
Boiling point/range	Do not distill (decomposes).
Melting point/range	Turbid < -10 °C.
Flashpoint	Above the SADT value.
Flammability	Not determined.
Auto ignition temperature	Test method not applicable. (See Section 7).
Explosive properties	Yes.
Explosion limits	Not applicable.
Oxidizing properties	Not applicable.
Vapour pressure	Not determined.
Density	1060 kg/m ³ (20 °C).
Bulk density	Not applicable.
Solubility in water	Partly miscible with water.
Solubility in other solvents	Phthalates.
pH value	Weak acid.
Partition coefficient, n-octanol/water	Not determined.
Relative vapor density (air=1)	Not determined.
Viscosity	Approx. 27 mPas (20 °C).
Active oxygen content	8.4-8.6 %.
Peroxide content	35 %.
SADT	60 °C. See also Section 10: Other information.
Specific conductivity	Not determined.

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10. Stability and Reactivity

Stability	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	Avoid temperatures above 25 °C store in original package. Avoid shock and friction. Confinement must be avoided.
Materials to avoid	Avoid contact with rust, iron and copper. Contact with incompatible materials such as acids, alkalis, heavy metals and reducing agents will result in hazardous decomposition. Do not mix with peroxide accelerators. 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	Emergency procedures will vary depending on conditions. The customer must have an emergency response plan in place.

11. Toxicological Information

No experimental toxicological data on the preparation as such available. The following data are applicable to the ingredient(s) listed below.

Methyl ethyl ketone peroxide, 40 % in Dimethyl phthalate	Oral LD50 rat: 1017 mg/kg Dermal LD50 rat: 4000 mg/kg Inhalation LC50 rat: 17 mg/l ; 4 h exposure time Skin: Corrosive Eye: Corrosive Sensitization: Not sensitizing Genotoxicity Ames test: Not mutagenic.
Methyl ethyl ketone	Oral LD50 rat: 2737 mg/kg Dermal LD50 rabbit: 6480 mg/kg Inhalation LC50 rat: 23.5000 mg/m ³ Skin: Moderately irritating Eye: Moderately irritating
Diisobutyl phthalate	Oral LD50 rat: >2000 mg/kg Skin: Non-irritating

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12. Eco-toxicological Information

No experimental ecological data are available on the preparation as such. The following data are applicable to the ingredient(s) listed below.

Methyl ethyl ketone peroxide, 40 % in Dimethyl phthalate	Fish acute toxicity, 96h-LC50: 44.2 mg/l. (Poecilia reticulata.) Bacteria activated sludge respiration inhibition test EC50: 48.0 mg/l. Degradation biotic: Readily biodegradable (closed bottle test).
Diisobutyl phthalate	Fish Acute toxicity, 96h-LC50: 3 mg/l Daphnia magna, 24h-EC50: 7.4 mg/l Degradation biotic: Readily biodegradable. Other information: Bio Concentration Factor (BCF) < 100.
Methyl ethyl ketone	Fish Lepomis macrochirus: 96h-LC50: 3.22 g/l Degradation biotic: Readily biodegradable. Other information: Naturally occurring substance.

13. Disposal

Disposal of product	Waste disposal in accordance with regulations (most probably controlled incineration).
Disposal of packaging	According to local regulations.
Other information	For further advice contact manufacturer.

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14. Transport Information

ADR/ADR-S/ RID/RID-S

UN-No: 3105

Proper shipping name: Organic peroxide type d, liquid; (Methyl ethyl ketone peroxide)

Class: 5.2

Classification code: P1

Packaging group: -

TREAM-Card or ERG no: CEFIC TEC (R)-52GP1-L

IMDG-code

UN-No: 3105

Proper shipping name: Organic peroxide type d, liquid; (Methyl ethyl ketone peroxide)

IMO-class: 5.2

Subsidiary risk: -

Packaging group: -

EmS No: F-J, S-R

Marine pollutant: No

DGR

UN-No: 3105

Proper shipping name: Organic peroxide type d, liquid; (Methyl ethyl ketone peroxide(s))

Class: 5.2

Subsidiary risk: -

Packaging group: -

According to existing regulations

ADR/ADR-S 2003-01-01

RID/RID-S 2003-01-01

IMDG-code Amdt 31-02

DGR 44th Edition

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15. Regulatory Information

Chemical description	Methyl ethyl ketone peroxide, solution in diisobutyl phthalate.	
Label Symbol(s):	 E- Explosive	 C -Corrosive
Risk Phrases	R2 Risk of explosion by shock, friction, fire or other sources of ignition. R7 May cause fire. R22 Harmful if swallowed. R34 Causes burns.	
Safety Phrases	S3/7 Keep 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). S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S50 Do not mix with peroxide-accelerators or reducing agents.	
Other information	Substance and/or product listed in Directive 96/82/EC. The environmental classification for this product comes into force on 30th July 2002 (1999/45/EC).	

16. Other Information

Explanation to R-phrases in section 2	R02 Risk of explosion by shock, friction, fire or other sources of ignition. R07 May cause fire. R11 Highly flammable. R22 Harmful if swallowed. R34 Causes burns. R36 Irritating to eyes. R66 Repeated exposure may cause skin dryness or cracking. R67 Vapours may cause drowsiness and dizziness.
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This information only concerns the above-mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

Important changes have been made in section: 1, 2, 3, 4, 6, 7, 10, 14 and 15.

DISCLAIM OF RESPONSIBILITY

Alfa Laval provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is only a guide to the potential hazards of the product.

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All individuals working with or around the product should be properly trained. Persons coming into contact with the product must be capable of exercising their own independent judgment concerning the conditions or methods of handling, storage and usage of the product. Alfa Laval will not be responsible for claims, losses, or damages of any kind resulting from the information provided in this Safety Data Sheet or the use, handling, storage or disposal of the product. **Alfa Laval makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability or fitness for a particular purpose with respect to the information set out herein or the product to which the information refers.**