



Safety Data Sheet dated 22/6/2015, version 2

Printing date: 22/6/2015



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: LDP 1800
MSDS code: F091800
Chemical description: Product based on fatty acids derivatives.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use:

Industrial uses.

1.3. Details of the supplier of the safety data sheet

Supplier:

Lamberti USA Inc. - Highway 59 at County Road 212 - P.O. Box 1000, Hungerford, TX 77448-U.S.A.

Tel. n° 281 342-5675 Fax n° 979 532-3749

Competent person responsible for the safety data sheet:

hse@lamberti.com

1.4. Emergency telephone number

CHEMTREC - Phone n. 800 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Following GHS and EC regulation criteria 1272/2008 (CLP)

Warning, Flam. Liq. 4, Combustible liquid.



Warning, Eye Irrit. 2A, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Symbols:



Warning

Hazard statements:

H227 Combustible liquid.

H319 Causes serious eye irritation.

Precautionary statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P370+P378 In case of fire: Use Water and Carbon dioxide (CO2) to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None



Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous substance/components within GHS Classification and the meaning of CLP regulation and related classification

>= 20% - < 35% 2-[2-(2-butoxyethoxy)ethoxy]ethanol;

Index number: 603-183-00-0, CAS: 143-22-6, EC: 205-592-6

A.3/1 Eye Dam. 1 H318

>= 10% - < 25% Distillates (petroleum), hydrotreated light;

Index number: 649-422-00-2, CAS: 64742-47-8, EC: 265-149-8

A.10/1 Asp. Tox. 1 H304

>= 1% - < 10% Propylene carbonate

Index number: 607-194-00-1, CAS: 108-32-7, EC: 203-572-1

A.3/2A Eye Irrit. 2A H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not under any circumstances induce vomiting. Seek immediately medical advice.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

Not known.

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

Not known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

Not known.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus .



Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 - Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
- 6.3. Methods and material for containment and cleaning up
 - Suitable material for taking up: absorbing material, organic, sand
 - Wash with plenty of water.
- 6.4. Reference to other sections
 - See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Do not use empty container before they have been cleaned.
 - Before making transfer operations, assure that there are not any incompatible material residuals in the containers.
 - Contaminated clothing should be changed before entering eating areas.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Keep away from food, drink and feed.
 - Instructions as regards storage premises:
 - Adequate ventilation in working area.
 - Packaging suggested:
 - Plastic drums.
- 7.3. Specific end use(s)
 - None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 - Distillates (petroleum), hydrotreated light
 - DE - TRGS 900 (MAK) - LTE(8h): 140 mg/m³, 20 ppm
 - DNEL Exposure Limit Values
 - 2-[2-(2-butoxyethoxy)ethoxy]ethanol
 - Worker Industry: 195 mg/m³ - Worker Professional: 195 mg/m³ - General population: 117 mg/m³ - Frequency: Long Term, systemic effects Human Inhalation
 - Worker Industry: 50 mg/kg - Worker Professional: 50 mg/kg - General population: 25 mg/kg - Frequency: Long Term, systemic effects Human Dermal
 - General population: 2.5 mg/kg - Frequency: Long Term, systemic effects Human Oral
 - PNEC Exposure Limit Values
 - 2-[2-(2-butoxyethoxy)ethoxy]ethanol
 - Fresh Water 1.5 mg/l
 - Marine water 0.15 mg/l
 - Intermittent release 5 mg/l
 - STP 200 mg/l
 - Freshwater sediments 5.77 mg/kg
 - Marine water sediments 0.13 mg/kg
 - Soil (agricultural) 0.45 mg/kg



Secondary poisoning 111 mg/kg

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles. (ref. EN 166, EN 140, EN175).

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton. (ref. EN 340).

Protection for hands:

Chemical-resistant protective gloves (EN 374). When prolonged or frequently repeated contact may occur, a glove is recommended to prevent contact. Examples of preferred glove barrier materials include: Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). As general indication we suggest as suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): nitrile rubber (NBR; ≥ 0.4 mm thickness) and suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): nitrile rubber (NBR; ≥ 0.4 mm thickness). This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances-mixtures.

Respiratory protection:

Use adequate protective respiratory equipment. (ref. EN 136, EN 140, EN 141, EN 143, EN 149, EN 405).

Thermal Hazards:

None

Environmental exposure controls:

None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour: Liquid, amber

Odour: Hydrocarbon

Odour threshold: N.D.

pH: N.D.

Melting point / freezing point: N.D.

Initial boiling point and boiling range: $>100^{\circ}\text{C}$ ($>212^{\circ}\text{F}$)

Solid/gas flammability: N.D.

Upper/lower flammability or explosive limits: N.D.

Vapour density: N.D.

Flash point: 61°C (142°F)

Evaporation rate: N.D.

Vapour pressure: N.D.

Relative density: 0.89 - 0.99

Solubility in water: Insoluble

Solubility in oil: N.D.

Partition coefficient (n-octanol/water): N.D.

Auto-ignition temperature: N.D.

Decomposition temperature: N.D.

Viscosity: N.D.

Explosive properties: N.D.

Oxidizing properties: N.D.

9.2. Other information

Miscibility: N.D.

Fat Solubility: N.D.

Conductivity: N.D.

Substance Groups relevant properties: N.D.

Osha Flammability: Combustible liquid

SECTION 10: Stability and reactivity

10.1. Reactivity



- Stable under normal conditions
- 10.2. Chemical stability
 - Stable under normal conditions
- 10.3. Possibility of hazardous reactions
 - Stable under normal conditions
- 10.4. Conditions to avoid
 - Stable under normal conditions.
- 10.5. Incompatible materials
 - Strong bases
 - Strong oxidizers
- 10.6. Hazardous decomposition products
 - Not known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

- a) acute toxicity:
 - Toxicity Oral Rat LD50> 2000 mg/kg. Based on components.
- b) skin corrosion/irritation:
 - Irritation Skin : Repeated and prolonged contacts may cause slight irritation.
- c) serious eye damage/irritation:
 - Irritation Eye : Causes serious eye irritation.

Toxicological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

- a) acute toxicity:
 - Toxicity Oral Rat LD50= 5170 mg/kg Literature data.
 - Toxicity Skin Rabbit LD50= 3540 mg/kg Literature data.
- b) skin corrosion/irritation:
 - Skin Irritant Rabbit : Not irritant. Literature data.
- c) serious eye damage/irritation:
 - Eye Irritant Rabbit : Irritant. Literature data.
- d) respiratory or skin sensitisation:
 - Guinea pig maximization test Skin Guinea pig : Not sensitizing. By analogy to product with similar composition.
- e) germ cell mutagenicity:
 - OECD 471 Salmonella typhimurium : Not mutagenic. - Duration: 48h Literature data.
- g) reproductive toxicity:
 - Reproductive Toxicity Oral Mouse NOAEL = 720 mg/kg By analogy to product with similar composition.

Distillates (petroleum), hydrotreated light

- a) acute toxicity:
 - Toxicity Oral Rat LD50> 5000 mg/kg Literature data.
 - Toxicity Inhalation Rat LC50 > 5.28 mg/l - Duration: 4h Literature data.
 - Toxicity Skin Rabbit LD50> 2000 mg/kg - Duration: 24h Literature data.
- b) skin corrosion/irritation:
 - EPA Guideline Skin Rabbit : Irritant. - Duration: 24h Literature data.
- c) serious eye damage/irritation:
 - EPA OTS: 798.4500 Eye Rabbit : Not irritant. Literature data.
- d) respiratory or skin sensitisation:
 - EPA Guideline Skin Guinea pig : Not sensitizing. Literature data.
- e) germ cell mutagenicity:
 - Mutagenesis Rat : Not mutagenic. Literature data.
- f) carcinogenicity:
 - Carcinogenecity Skin Mouse Negative - Duration: > 90 days. Literature data.
- g) reproductive toxicity:
 - Reproductive Toxicity Oral Rat NOAEL > 3000 mg/kg - Duration: 90 days Literature data.
 - Notes: Related to male.
 - Reproductive Toxicity Oral Rat NOAEL > 1500 mg/kg - Duration: > 90 days. Literature data.
 - Notes: Related to female.



Other : N.D.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.D.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

Carcinogenic IARC: Not Carcinogenic IARC/NTP/OSHA

SECTION 12: Ecological information

12.1. Toxicity

Ecological information of the mixture:

- a) Aquatic acute toxicity:

Data not available.

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

- a) Aquatic acute toxicity:

Fish NOEC = 1000 mg/l - Duration h: 96 - Notes: Literature data.

Daphnia magna LC50 = 2210 mg/l - Duration h: 48 - Notes: Literature data.

Distillates (petroleum), hydrotreated light

- a) Aquatic acute toxicity:

OECD 203 Fish LL50 > 2 mg/l - Duration h: 96 - Notes: Literature data.

OECD 202 Daphnia magna EL50 = 1.4 mg/l - Duration h: 48 - Notes: Literature data.

OECD 201 Algae EL50 = 1-3 mg/l - Duration h: 72 - Notes: Literature data.

- b) Aquatic chronic toxicity:

Fish NOEL = 0.098 mg/l - Duration h: 672 - Notes: By analogy to product with similar composition.

OECD 211 Daphnia magna EL50 = 0.81 mg/l - Duration h: 504 - Notes: Literature data.

- c) Bacteria toxicity:

Bacteria LL50 = 677.9 mg/l - Duration h: 72 - Notes: By analogy to product with similar composition.

12.2. Persistence and degradability

Ecological information of the mixture:

Biodegradability: Data not available.

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Biodegradability: Readily biodegradable - Test: OECD 301 D - Duration: 28 days: 85% - Notes: Literature data.

Distillates (petroleum), hydrotreated light

Biodegradability: Non-readily biodegradable - Test: OECD 301 F - Duration: 28 days: 58.6% - Notes: Literature data.

12.3. Bioaccumulative potential

Ecological information of the mixture:

Bioaccumulation: Data not available.

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Bioaccumulation: Not bioaccumulative - Test: BCF - Bioconcentration factor 3 - Notes: Calculated data.

Distillates (petroleum), hydrotreated light

Bioaccumulation: Bioaccumulative - Test: BCF - Bioconcentration factor 150-57000 - Notes: Calculated data (in silico).

12.4. Mobility in soil

Ecological information of the mixture:



Mobility in soil: Data not available.

Ecological information of the main substances found in the mixture:

2-[2-(2-butoxyethoxy)ethoxy]ethanol

Mobility in soil: Very high - Test: Koc: 10 - Notes: Calculated data.

Distillates (petroleum), hydrotreated light

Mobility in soil: Very high - Test: Koc: 2.9-4.6 - Notes: Calculated data.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

Use according to criteria of good industrial practice, avoiding product dispersion in the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

If possible recover the product, otherwise dispose of in authorized landfill or incineration in accordance with local regulation.

SECTION 14: Transport information

14.1. UN number

NA1993

14.2. UN proper shipping name

Proper Shipping Name: Combustible liquid, n.o.s., (Petroleum distillates),

14.3. Transport hazard class(es)

US DOT(Non-bulk): Not Regulated

US DOT(Bulk): NA1993, Combustible liquid, n.o.s., (Petroleum distillates), PG-III

Road (ADR): Not Regulated

Air (ICAO/IATA): Not Regulated

Sea (IMO/IMDG): Not Regulated

14.4. Packing group

ADR-Packing Group: N.A.

IATA-Packing group: N.A.

IMDG-Packing group: N.A.

14.5. Environmental hazards

N.A.

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 2000/39/EC (Occupational exposure limit values); Dir. 2006/8/CE. Regulation (CE) n. 1907/2006 (REACH).

For non-EU Countries, the Material Safety Data Sheet it is prepared following the main principles of Globally Harmonized System of Classification and Labelling of Chemicals (GHS) which are adopted worldwide.

Refer to other local regulations that may be relevant (i.e. : sanitary control, waste treatment etc.)

15.2. Chemical safety assessment

No

Regulatory information USA:

HMIS INFORMATION

HAZARD INDEX: 4 = SEVERE

HEALTH 2

3 = SERIOUS

FLAMMABILITY 2

2 = MODERATE

REACTIVITY 1

1 = SLIGHT



PERSONAL PROT. D

0 = MINIMAL

D* Face shield, gloves, chemical apron

n	Name	CAS	TSCA	CERCLA	Sara302	Sara313
0	2-[2-(2-butoxyethoxy)ethoxy]ethanol	143-22-6	Yes	No	No	Yes
1	Distillates (petroleum), hydrotreated light	64742-47-8	Yes	No	No	No
2	Propylene carbonate	108-32-7	Yes	No	No	No
3	Non-hazardous components	-	Yes	No	No	No

SARA Title III Section 311/312: Immediate (acute) health effects./Fire Hazard

State Regulations:

Canadian Regulations: All the ingredients as such or as chemical group are registered in DSL.

Canadian WHMIS Classification: D-2B (Toxic material) , B-3 (Combustible liquid)

California Proposition 65: Not cited (all components).

SECTION 16: Other information

The substance contains polyethylene glycol monobutyl ether (CAS number 9004-77-7) as impurity (max. 10%)

N.A. = Not Applicable

N.D. = No Data available

Full text of phrases referred to in Section 3.

H318 Causes serious eye damage.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

This safety data sheet has been completely updated in compliance to Regulation 453/2010/EU.

Paragraphs modified from the previous revision:

SECTION 3: Composition/information on ingredients

SECTION 8: Exposure controls/personal protection

SECTION 11: Toxicological information

SECTION 12: Ecological information

SECTION 15: Regulatory information

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

TOXNET - Databases on toxicology, hazardous chemicals, environmental health, and toxic releases;

NIOSH - Registry of toxic effects of chemical substances (1983) - Occupational Health

Guidelines for Chemical Hazards (1995) - Pocket Guide to Chemical Hazards (on line)

European Chemical Bureau - ESIS: European chemical Substances Information System;

CESIO - Classification and labelling of anionic, nonionic surfactants (January 2000).

M.Sittig-Handbook of toxic and Hazardous Chemicals and Carcinogens- III Ed.

E.R. Plunkett - Handbook of Industrial Toxicology - III Ed. 1991.

Samson Chem. Pub.-Chemical Safety Sheet working safely with hazardous chemical.

SAX'S Dangerous Properties of Industrial Materials. VIII (1993)

ACGIH "2013 TLVs and BEIs".

ILV "1998/24/EC Directive and subsequent addition".

The product must be stored, handled and used according to criteria of good industrial practice and to regulations in force. This leaflet is offered for your consideration and guidance only. This leaflet complements the Technical Data Sheet but does not replace it. The information herein contained is given to the best of our knowledge at the time of issue.

Due to the several ways in which the product may be used and the possible interaction with variables not depending on or unknown to the supplier, we also cannot accept any liability whatsoever for any loss or damage however arising from the handling and use of our products.



ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
PNEC:	Predicted No Effect Concentration.
REACH:	Registration Evaluation and Authorization of Chemicals.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
SVHC:	Candidate List of Substances of Very High Concerns.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
WGK:	German Water Hazard Class.
ASTM:	American Society of Testing and Materials.
CBI:	Confidential Business Information
CFR:	Code of Federal Regulations
DOT:	Department of Transportation
EPA:	Environmental Protection Agency
EU:	European Union
FIFRA:	Federal Insecticide, Fungicide and Rodenticide Act
HCS:	Hazard Communication Standard
IARC:	International Agency for Research on Cancer
IUPAC:	International Union of Pure and Applied Chemistry
mg/kg:	Milligram per kilogram
MSDS:	Material Safety Data Sheet
NAFTA:	North American Free Trade Agreement
OSHA:	Occupational Safety and Health Administration
OECD:	The Organization for Economic Cooperation and Development
QSARs:	Quantitative Structure-Activity Relationships
TSCA:	Toxic Substances Control Act
UN:	United Nations
WHMIS:	Workplace Hazardous Materials Information System