

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

1.1. Product identifier

Product form : Mixture
 Trade name : **ALBERDINGK® LUX 484**
 Other means of identification : Binding Agent

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

Use of the substance/mixture : No Information Available

1.3. Details of the supplier of the safety data sheet

ALBERDINGK BOLEY INC
 6008 W. Gate City Boulevard
 Greensboro, NC 27407 - USA
 T +1-866-220-4750 - F 336-454-5007
info@alberdingkusa.com - www.alberdingk.com

1.4. Emergency telephone number

Emergency number : Emergency Contact (24-Hour-Number): Chemtrec 1800-424-9300 or 1-703-527-3887

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315
 Eye Irrit. 2A H319

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning
 Hazard statements (GHS-US) : H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 Precautionary statements (GHS-US) : P264 - Wash hands thoroughly after handling
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P302+P352 - If on skin: Wash with plenty of water/
 P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P332+P313 - If skin irritation occurs: Get medical advice/attention
 P337+P313 - If eye irritation persists: Get medical advice/attention
 P362 - Take off contaminated clothing and wash before reuse

2.3. Other hazards

Other hazards not contributing to the classification : Not classified as PBT or vPvB.

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture: Hazardous ingredients

Name	Product identifier	%	Classification (GHS-US)
Dipentaerythritol Hexa-Acrylate	(CAS No) 29570-58-9	3 - 5	Not classified

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Name	Product identifier	%	Classification (GHS-US)
Trimethylolpropane ethoxylate triacrylate	(CAS No) 28961-43-5	3 - 5	Not classified
N-ethyl morpholine	(CAS No) 100-74-3	1 - 1.5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302
triethylamine	(CAS No) 121-44-8	0.2 - 1	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Acute Tox. 4 (Inhalation:dust,mist), H332 Skin Corr. 1A, H314
1,2-benzisothiazol-3(2H)-one	(CAS No) 2634-33-5	0.01 - 0.03	Acute Tox. 4 (Oral), H302

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Allow victim to breathe fresh air. Allow the victim to rest.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see ... on this label).
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Reactivity : Not classified as dangerous substance / mixture.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Good ventilation of the workplace required.
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.
Handling temperature	: 5 - 30 °C
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: No additional information available.
Storage conditions	: Protect against frost. Keep container closed when not in use.
Incompatible products	: Strong bases. Strong acids.
Incompatible materials	: Sources of ignition. Direct sunlight.
Maximum storage period	: 6 months
Storage temperature	: 10 - 30 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

N-ethyl morpholine (100-74-3)		
USA ACGIH	ACGIH TWA (ppm)	5 ppm
USA ACGIH	ACGIH STEL (ppm)	5 ppm
USA ACGIH	Remark (ACGIH)	URT irr; eye dam
USA OSHA	OSHA PEL (TWA) (mg/m ³)	94 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	20 ppm

triethylamine (121-44-8)		
USA ACGIH	ACGIH TWA (ppm)	1 ppm
USA ACGIH	ACGIH STEL (ppm)	2 ppm
USA ACGIH	Remark (ACGIH)	Visual impair; Skin; A4
USA OSHA	OSHA PEL (TWA) (mg/m ³)	100 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	25 ppm

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Wear appropriate mask.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Yellow
Odor	: characteristic
Odor threshold	: No data available
pH	: 7 - 8.5
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 0 °C
Freezing point	: 0 °C

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Boiling point	: 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 2.3 kPa at RT
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.05 g/cm ³
Percent Solids	: 36 - 38 %
Solubility	: Soluble in water. Water: Solubility in water of component(s) of the mixture : • : • : 17 g/100ml
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not classified as dangerous substance / mixture.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

N-ethyl morpholine (100-74-3)	
LD50 oral rat	1780 mg/kg (Rat)
ATE US (oral)	1780.00000000 mg/kg body weight
triethylamine (121-44-8)	
LD50 oral rat	> 460 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 730 mg/kg bodyweight; Rat)
LD50 dermal rabbit	416 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 580 mg/kg bodyweight; Rabbit)
LC50 inhalation rat (mg/l)	> 4.2 mg/l/4h (Rat)
ATE US (oral)	500.00000000 mg/kg body weight
ATE US (dermal)	416.00000000 mg/kg body weight
ATE US (dust, mist)	1.50000000 mg/l/4h

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1,2-benzisothiazol-3(2H)-one (2634-33-5)	
LD50 oral rat	1020 mg/kg (Rat; Literature study)
ATE US (oral)	1020.00000000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation. pH: 7 - 8.5
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7 - 8.5
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye irritation.

SECTION 12: Ecological information

12.1. Toxicity

triethylamine (121-44-8)	
LC50 fish 1	43.7 mg/l (96 h; Pimephales promelas; GLP)
EC50 Daphnia 1	200 mg/l (48 h; Daphnia magna; Inhibitory)
LC50 fish 2	330 mg/l (96 h; Poecilia reticulata)
Threshold limit other aquatic organisms 1	< 85 mg/l (Bacteria; Toxicity test)
Threshold limit algae 1	1 mg/l (96 h; Scenedesmus quadricauda; Inhibitory)
Threshold limit algae 2	> 1 mg/l (Scenedesmus quadricauda)

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
LC50 fish 1	10 mg/l (96 h; Alburnus alburnus)

12.2. Persistence and degradability

ALBERDINGK® LUX 484	
Persistence and degradability	Not established.

N-ethyl morpholine (100-74-3)	
Persistence and degradability	Biodegradability in water: no data available.

triethylamine (121-44-8)	
Persistence and degradability	Readily biodegradable in water. Low potential for adsorption in soil. Photodegradation in the air.
Biochemical oxygen demand (BOD)	< 0.001 g O ₂ /g substance
Chemical oxygen demand (COD)	1.020 g O ₂ /g substance

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
Persistence and degradability	Biodegradable in water. No (test)data on mobility of the substance available.

12.3. Bioaccumulative potential

ALBERDINGK® LUX 484	
Bioaccumulative potential	Not established.

N-ethyl morpholine (100-74-3)	
Log Pow	0.14
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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triethylamine (121-44-8)	
BCF fish 1	< 0.5 (42 days; Cyprinus carpio)
BCF other aquatic organisms 1	7.45 (QSAR)
Log Pow	1.45 (Experimental value; Other)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
Log Pow	1.3 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

triethylamine (121-44-8)	
Surface tension	0.021 N/m (20 °C)

12.5. Other adverse effects

Effect on ozone layer	: No additional information available
Effect on the global warming	: No known ecological damage caused by this product.
Other information	: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

ALBERDINGK® LUX 484	
Not listed on the United States TSCA (Toxic Substances Control Act) inventory	

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

triethylamine (121-44-8)	
Listed on United States SARA Section 313	
RQ (Reportable quantity, section 304 of EPA's List of Lists)	5000 lb

15.2. International regulations

CANADA

ALBERDINGK® LUX 484	
Not listed on the Canadian DSL (Domestic Substances List)	

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EU-Regulations

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Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

triethylamine (121-44-8)

U.S. - Massachusetts - Right To Know List

SECTION 16: Other information

Other information

:
: None.

Full text of H-phrases: see section 16:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product