

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture
 Trade name : ALBERDINGK® LUX 481
 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@alberdingk-boley.de - 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
 Skin Sens. 1 H317

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
 H317 - May cause an allergic skin reaction
 H319 - Causes serious eye irritation

Precautionary statements (GHS-US) : P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P264 - Wash hands thoroughly after handling
 P272 - Contaminated work clothing must not be allowed out of the workplace
 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
 P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
 P337+P313 - If eye irritation persists: Get medical advice/attention
 P362 - Take off contaminated clothing and wash before reuse
 P362+P364 - Take off contaminated clothing and wash it 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

ALBERDINGK® LUX 481

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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	< 10	Not classified
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
1,2-benzisothiazol-3(2H)-one	(CAS No) 2634-33-5	< 0.03	Acute Tox. 4 (Oral), H302
CIT	(CAS No) 26172-55-4	< 0.0000075	Not classified
2-methylisothiazol-3(2H)-one	(CAS No) 2682-20-4	< 0.0000075	Not classified

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	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.
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 : Not expected to present a significant hazard under anticipated conditions of normal use.

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.

ALBERDINGK® LUX 481

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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

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

8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear protective gloves.
Eye protection	: Chemical goggles or safety glasses.
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
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: 0 °C
Freezing point	: 0 °C
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
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Specific gravity / density	: 1.05 g/cm ³
Percent Solids	: 39 - 41 %

ALBERDINGK® LUX 481

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Solubility	: Soluble in water. Water: Solubility in water of component(s) of the mixture : • :
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

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
Serious eye damage/irritation	: Causes serious eye irritation. pH: 7 - 8
Respiratory or skin sensitization	: May cause an allergic skin reaction.
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.

ALBERDINGK® LUX 481

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

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 481

Persistence and degradability	Not established.
-------------------------------	------------------

N-ethyl morpholine (100-74-3)

Persistence and degradability	Biodegradability in water: no data available.
-------------------------------	---

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 481

Bioaccumulative potential	Not established.
---------------------------	------------------

N-ethyl morpholine (100-74-3)

Log Pow	0.14
---------	------

Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
---------------------------	--

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

No additional information available

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 481

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

ALBERDINGK® LUX 481

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

ALBERDINGK® LUX 481

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.

15.2. International regulations

CANADA

ALBERDINGK® LUX 481

Not listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

ALBERDINGK® LUX 481

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)- Directive 79/831/EEC, sixth Amendment of Directive 67/548/EEC (dangerous 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

SECTION 16: Other information

Other information :
: None.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization Category 1
H226	Flammable liquid and vapor
H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation

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