

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

Product form : Mixture
Trade name : ALBERDINGK® U 9350
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): GBK GmbH +49-6132-84463

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
P321 - Specific treatment (see information on this label)
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

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| Name | Product identifier | % | Classification (GHS-US) |
|---------------|--------------------|---------|---|
| triethylamine | (CAS No) 121-44-8 | 1 - 1.5 | 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 |

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Good ventilation of the workplace required.

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| | |
|-------------------------------|---|
| 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 hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |

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

| 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 | : Colourless to white |
| Odor | : characteristic |
| Odor threshold | : No data available |
| pH | : 7.5 - 8.5 |
| 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 | : 29 - 31 % |

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| | |
|----------------------|--|
| 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 | : 10 - 300 mPa.s |
| 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

| 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) | 500.0000000 mg/kg body weight |
| ATE US (dermal) | 416.0000000 mg/kg body weight |
| ATE US (dust, mist) | 1.50000000 mg/l/4h |

| | |
|--|---|
| Skin corrosion/irritation | : Causes skin irritation. pH: 7.5 - 8.5 |
| Serious eye damage/irritation | : Causes serious eye irritation. pH: 7.5 - 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 |

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| | |
|---|---|
| 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) |

12.2. Persistence and degradability

| ALBERDINGK® U 9350 | |
|-------------------------------|------------------|
| Persistence and degradability | Not established. |

| 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 |

12.3. Bioaccumulative potential

| ALBERDINGK® U 9350 | |
|---------------------------|------------------|
| Bioaccumulative potential | Not established. |

| 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). |

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. |
|-------------------|---|

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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

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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

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Not listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

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Not 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 |
| Skin Corr. 1A | Skin corrosion/irritation Category 1A |
| Skin Irrit. 2 | Skin corrosion/irritation Category 2 |
| H225 | Highly flammable liquid and vapor |
| H302 | Harmful if swallowed |

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| | |
|------|---|
| 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