

Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 02.02.2010

Revision: 28.01.2010

1 Identification of substance:

- **Product details:**
- **Trade name:** VALTRON® AD1210-B
- **Application of the substance / the preparation:** Hardening agent / Curing agent
- **Manufacturer / Supplier:**
N. Bucher AG
Pfadackerstraße 9
CH-8957 Spreitenbach
Switzerland
Tel.: ++41-56 418 19 90
Fax: ++41-56 418 19 99
- **E-mail address of the competent person responsible for the Safety Data Sheet:** info@nbucherag.com
- **Informing department:** Sales
- **Emergency information:** As above or next toxicological information centre

2 Hazards identification

- **Hazard designation:**



C Corrosive

- **Information pertaining to particular dangers for man and environment**
R 21/22 Harmful in contact with skin and if swallowed.
R 34 Causes burns.
R 37 Irritating to respiratory system.
R 43 May cause sensitisation by skin contact.
R 62 Possible risk of impaired fertility.
- **Classification system**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

3 Composition/information on ingredients

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 111-40-0 EINECS: 203-865-4 Index number: 612-058-00-X	Diethylenetriamine C, Xn; R 21/22-34-43	25-50%
CAS: 80-05-7 EINECS: 201-245-8 Index number: 604-030-00-0	Bisphenol A Repr. Cat. 3; Xn, Xi; R 37-41-43-62-52	5-25%
CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7	2-Methoxy-1-methylethyl acetate Xi; R 10-36	< 2.5%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

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4 First aid measures

- **General information:**

Immediately remove any clothing contaminated by the product.

Symptoms of poisoning may occur after several hours. Medical observation for at least 48 hours after the accident is recommended.

Personal protection for the person providing first aid.

- **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor.

In case of unconsciousness bring patient into stable side position for transport.

- **After skin contact:**

Instantly rinse with water.

Seek medical treatment.

- **After eye contact:**

Rinse opened eye for several minutes under running water. Then consult doctor.

Use eye protection.

- **After swallowing:**

Drink copious amounts of water and provide fresh air. Instantly call for doctor.

Do not induce vomiting - Danger of perforation!

5 Fire fighting measures

- **Suitable extinguishing agents**

Carbon dioxide (CO₂), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.

- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.

- **Special hazards caused by the material, its products of combustion or flue gases:**

Nitrogen oxides (NO_x)

Ammonia (NH₃)

Carbon monoxide (CO) and Carbon dioxide (CO₂)

Aldehydes

- **Protective equipment:** Wear self-contained breathing apparatus.

- **Additional information**

Cool endangered containers with water spray jet.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Person-related safety precautions:**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Use breathing protection against the effects of fumes/dust/aerosol.

Avoid skin and eye contact.

- **Measures for environmental protection:** Do not allow to enter drainage system, surface or ground water.

- **Measures for cleaning/collecting:**

Ensure adequate ventilation.

Absorb with liquid-binding, inert material (sand, diatomite, acid binders, universal binders).

Dispose of the material collected according to regulations.

7 Handling and storage

- **Handling**

- **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Avoid breathing vapours.

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Avoid skin and eye contact under any circumstances.

Make sure that all applicable workplace limits are observed.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **Storage**

· **Requirements to be met by storerooms and containers:**

Observe all local and national regulations for storage of water polluting products.

· **Information about storage in one common storage facility:**

Do not store together with oxidizing and acidic materials.

Store away from foodstuffs.

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed containers.

Store container in a well ventilated position.

8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with critical values that require monitoring at the workplace:**

111-40-0 Diethylenetriamine

WEL (Great Britain)	Long-term value: 4.3 mg/m ³ , 1 ppm
	Sk

108-65-6 2-Methoxy-1-methylethyl acetate

WEL (Great Britain)	Short-term value: 548 mg/m ³ , 100 ppm
	Long-term value: 274 mg/m ³ , 50 ppm
	Sk
IOELV (European Union)	Short-term value: 550 mg/m ³ , 100 ppm
	Long-term value: 275 mg/m ³ , 50 ppm
	Skin

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures**

Keep away from foodstuffs, beverages and food.

Instantly remove any contaminated garments.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Wash hands during breaks and at the end of the work.

· **Breathing equipment:**

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

· **Protection of hands:**

Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.

Check the permeability prior to each renewed use of the glove.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· **Material of gloves**

Neoprene gloves

Product can penetrate gloves.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Tightly sealed safety glasses
- **Body protection:** Protective work clothing

9 Physical and chemical properties:

· General Information

Form:	liquid viscous
Colour:	dark green
Smell:	irritant

· Change in condition

Melting point/Melting range: not determined
Boiling point/Boiling range: not determined

· **Flash point:** 110°C

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures is possible.

· Critical values for explosion:

Lower:	4.4 Vol %
Upper:	16.1 Vol %

· **Vapour pressure at 21°C:** < 1.3 hPa

· **Density at 20°C** 1.08 g/cm³

· Solubility in / Miscibility with

Water: soluble

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
Avoid impact, friction, heat, sparks, electrostatic charges.
- **Materials to be avoided:**
Strong oxidizing agents
Acids
- **Dangerous reactions**
Forms explosive gases / fumes
The product forms flammable fumes when heated.
- **Dangerous products of decomposition:**
Nitrogen oxides (NO_x)
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Ammonia (NH₃)
Aldehydes

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11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

111-40-0 Diethylenetriamine

Oral	LD50	1540 mg/kg (rat)
Dermal	LD50	672 mg/kg (rabbit)

80-05-7 Bisphenol A

Oral	LD50	3250 mg/kg (rat)
Dermal	LD50	3000 mg/kg (rabbit)

- **Primary irritant effect:**

- **on the skin:** Corrosive to skin and mucous membranes.

- **on the eye:** Corrosive

- **Sensitization:** Sensitization possible by skin contact.

- **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Harmful

Corrosive

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Irritant

Sensitising

Repr. Cat. 3: Product causes concern for human fertility.

Danger by skin resorption.

- **Sensitisation** May cause sensitisation by skin contact.

12 Ecological information:

- **Ecotoxicological effects:**

- **Aquatic toxicity:**

111-40-0 Diethylenetriamine

EC50/48 h	53.5 mg/l (water flea (daphnia magna))
IC50/72 h	1164 mg/l (selenastrum capricornutum)
LC50/96 h	430 mg/l (leuciscus idus)

- **General notes:** Water hazard class 2 (Self-assessment): hazardous for water

13 Disposal considerations

- **Product:**

- **Recommendation** Disposal must be made according to official regulations.

- **European waste catalogue:**

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

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14 Transport information

· **Land transport ADR/RID (cross-border):**



- **ADR/RID Class:** 8 (C7) Corrosive substances.
- **Kepler Number:** 80
- **UN-Number:** 2735
- **Packaging group:** III
- **Label:** 8
- **Designation of goods:** UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE)
- **Limited quantities (LQ):** LQ7
- **Transport category:** 3
- **Tunnel restriction code:** E

· **Maritime transport IMDG-Code:**



- **IMDG Class:** 8
- **UN Number:** 2735
- **Label:** 8
- **Packaging group:** III
- **EMS Number:** F-A,S-B
- **Correct technical name:** AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE)

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 8
- **UN/ID Number:** 2735
- **Label:** 8
- **Packaging group:** III
- **Correct technical name:** AMINES, LIQUID, CORROSIVE, N.O.S. (DIETHYLENETRIAMINE)

· **Transport/Additional information:** Transport by post may be prohibited or restricted.

15 Regulatory information

· **Designation according to EC guidelines:**
The product has been classified/labelled in accordance with EC Directives / relevant national laws.

· **Code letter and hazard designation of product:**



C Corrosive

· **Hazard-determining components of labelling:**

Diethylenetriamine
Bisphenol A

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· **Risk phrases:**

- 21/22 Harmful in contact with skin and if swallowed.
- 34 Causes burns.
- 37 Irritating to respiratory system.
- 43 May cause sensitisation by skin contact.
- 62 Possible risk of impaired fertility.

· **Safety phrases:**

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

· **National regulations**· **Information about limitation of use:**

- Employment restrictions concerning young persons must be observed.
- Employment restrictions concerning women of child-bearing age must be observed.

· **Decree to be applied in case of technical fault: -**· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water· **Other regulations, limitations and prohibitive regulations**

- Observe restrictions on the marketing and use according to Annex XVII of Regulation (EC) No 1907/2006.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Reasons for changes:**

The Material Safety Data Sheet has been revised. Changes in the respective chapters are characterized in the left side edge by *.

· **Relevant R-phrases:**

The(se) R-phrase(s) are those of the ingredient(s) and do(es) not necessarily represent the classification of the preparation.

- 10 Flammable.
- 21/22 Harmful in contact with skin and if swallowed.
- 34 Causes burns.
- 36 Irritating to eyes.
- 37 Irritating to respiratory system.
- 41 Risk of serious damage to eyes.
- 43 May cause sensitisation by skin contact.
- 52 Harmful to aquatic organisms.
- 62 Possible risk of impaired fertility.

· **Department issuing MSDS:**

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· *** Data compared to the previous version altered.**