

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

## 1 Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

Trade name: **Valtron AD4110-A**

Article number: AD4110-A

1.2 Relevant identified uses of the substance or mixture and uses advised against  
No further relevant information available.

Application of the substance / the mixture Epoxy resin

### 1.3 Details of the supplier of the Safety Data Sheet

Manufacturer/Supplier:

Valtech Corporation  
2113 Sanatoga Station Road  
Pottstown, PA 19464-3275 USA  
610-705-5900



### 1.4 Emergency telephone number:

CHEMTREC  
1-800-424-9300 (US/Canada)  
+01 703-527-3887 (International)

## 2 Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H411.



health hazard

Carc. 2                      H351 Suspected of causing cancer.



environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



Skin Irrit. 2                      H315 Causes skin irritation.

Eye Irrit. 2                      H319 Causes serious eye irritation.

Skin Sens. 1                      H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R40:                      Limited evidence of a carcinogenic effect.

Xi; Irritant

R36/38:                      Irritating to eyes and skin.

(Contd. on page 2)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 1)



Xi; Sensitising

R43: May cause sensitisation by skin contact.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Information concerning particular hazards for human and environment:**

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.

**Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

**Hazard pictograms**

This pictogram only applicable for EU regulations. Not for use in the United States (OSHA GHS).



GHS07 GHS08 GHS09

**Signal word Warning****Hazard-determining components of labelling:**

Reaction Product of Bisphenol F / Epichlorohydrin / co-Formaldehyde  
1,1-dichloroethylene

**Hazard statements**

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H411.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P281 Use personal protective equipment as required.

P264 Wash thoroughly after handling.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing mist/vapours/spray.

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

(Contd. on page 3)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 2)

P308+P313  
P501

IF exposed or concerned: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Additional information:**  
Contains epoxy constituents. May produce an allergic reaction.
- **Hazard description:**
- **WHMIS-symbols:**  
D2B - Toxic material causing other toxic effects



- **NFPA ratings (scale 0 - 4)**



Health = 1  
Fire = 1  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = \*1  
Fire = 1  
Reactivity = 0

- \* - Indicates a long term health hazard from repeated or prolonged exposures.

- **HMIS Long Term Health Hazard Substances**

None of the ingredients is listed.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## 3 Composition/information on ingredients

- **3.2 Mixtures**

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

- **Dangerous components:**

CAS: 28064-14-4	Reaction Product of Bisphenol F / Epichlorohydrin / co- Formaldehyde Xi R36/38;  Xi R43;  N R51/53 Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317	25-60%
-----------------	--	--------

(Contd. on page 4)

# Safety Data Sheet









according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A












(Contd. of page 3)

CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0	isobutane  F+ R12  Flam. Gas 1, H220  Press. Gas, H280	<50%
CAS: 75-35-4 EINECS: 200-864-0 Index number: 602-025-00-8	1,1-dichloroethylene  Xn R20-40;  F+ R12 Carc. Cat. 3  Flam. Liq. 1, H224  Carc. 2, H351  Acute Tox. 4, H332	1-3%

Additional information:

For the wording of the listed risk phrases refer to section 16.  
Isobutane encapsulated in polymer.

Notable Trace Components ( $\leq 0,1\%$  w/w)

CAS: 107-13-1 EINECS: 203-466-5 Index number: 608-003-00-4	acrylonitrile  T Carc. Cat. 2 R45-23/24/25;  Xi R37/38-41;  Xi R43;  F R11;  N R51/53  Flam. Liq. 2, H225  Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331  Carc. 1B, H350  Eye Dam. 1, H318  Aquatic Chronic 2, H411  Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335
--	--

## 4 First aid measures

### 4.1 Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air; consult doctor in case of complaints.

Provide oxygen treatment if affected person has difficulty breathing.

Respiration of particulates is unlikely during normal usage.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Do not pull solidified product off the skin.

If skin irritation continues, consult a doctor.

After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

(Contd. on page 5)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

**Trade name: Valtron AD4110-A**

(Contd. of page 4)

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

Allergic reactions  
Nausea  
Coughing  
Breathing difficulty  
Dizziness  
Gastric or intestinal disorders.  
Irritant to eyes.  
Irritant to skin and mucous membranes.

**4.3 Hazards**

Danger of impaired breathing.  
Limited evidence of a carcinogenic effect.

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

Medical supervision for at least 48 hours.  
If necessary oxygen respiration treatment.  
Treat skin and mucous membrane with antihistamine and corticoid preparations.

**5 Firefighting measures****5.1 Extinguishing media****Suitable extinguishing agents:**

Water haze or fog  
Foam  
Fire-extinguishing powder  
Carbon dioxide

**For safety reasons unsuitable extinguishing agents:**

Water with full jet  
Water spray

**5.2 Special hazards arising from the substance or mixture**

During heating or in case of fire poisonous gases are produced.

**5.3 Advice for firefighters****Protective equipment:**

Wear self-contained respiratory protective device.  
Wear fully protective suit.

**Additional information**

Eliminate all ignition sources if safe to do so.  
Cool endangered receptacles with water fog or haze.

**6 Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.  
Ensure adequate ventilation  
Wear protective equipment. Keep unprotected persons away.

**6.2 Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

(Contd. on page 6)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 5)

Inform respective authorities in case of seepage into water course or sewage system.

· **6.3 Methods and material for containment and cleaning up:**

- Allow to solidify. Pick up mechanically.
- Clean the affected area carefully; suitable cleaners are:
- Warm water and cleansing agent
- Dispose contaminated material as waste according to item 13.
- Ensure adequate ventilation.

· **6.4 Reference to other sections**

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

## 7 Handling and storage

· **7.1 Precautions for safe handling**

- Store in cool, dry place in tightly closed receptacles.
- Use only in well ventilated areas.
- Open and handle receptacle with care.

· **Information about fire - and explosion protection:**

- Keep respiratory protective device available.
- Protect from heat.

· **7.2 Conditions for safe storage, including any incompatibilities**

· **Storage:**

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

- Store in a cool location.
- Store only in the original receptacle.
- Avoid storage near extreme heat, ignition sources or open flame.

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

- Store away from foodstuffs.
- Store away from oxidizing agents.

· **Further information about storage conditions:**

- Keep container tightly sealed.
- Store receptacle in a well ventilated area.

· **7.3 Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

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

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**75-28-5 isobutane**

TLV (USA)	Short-term value: 2370 mg/m <sup>3</sup> , 1000 ppm
EV (Canada)	Long-term value: 800 ppm

(Contd. on page 7)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 6)

**75-35-4 1,1-dichloroethylene**

REL (USA)	See Pocket Guide App.A
TLV (USA)	Long-term value: 20 mg/m <sup>3</sup> , 5 ppm
EL (Canada)	Long-term value: 1 ppm
EV (Canada)	Short-term value: 80 mg/m <sup>3</sup> , 20 ppm Long-term value: 4 mg/m <sup>3</sup> , 1 ppm

- **DNELs** No further relevant information available.
- **PNECs** No further relevant information available.
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
The usual precautionary measures are to be adhered to when handling chemicals.  
Do not inhale gases / fumes / aerosols.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Respiratory protection:**  
Not required under normal conditions of use.  
Use suitable respiratory protective device in case of insufficient ventilation.  
Use suitable respiratory protective device when aerosol or mist is formed.  
For spills, respiratory protection may be advisable.  
Use respiratory protection when grinding or cutting material.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

• **Material of 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.

• **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.

(Contd. on page 8)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 7)

• **Eye protection:**



Safety glasses

• **Body protection:** Protective work clothing

• **Limitation and supervision of exposure into the environment** No special requirements.

• **Risk management measures**

See Section 7 for additional information.

No further relevant information available.

## 9 Physical and chemical properties

• **9.1 Information on basic physical and chemical properties**

• **General Information**

• **Appearance:**

Form:

Viscous

Colour:

White

• **Odour:**

Mild

• **Odour threshold:**

Not determined.

• **pH-value:**

Not determined.

• **Change in condition**

Melting point/Melting range:

Not Determined.

Boiling point/Boiling range:

&gt;200 °F / &gt;93 °C

• **Flash point:**

Not applicable.

• **Flammability (solid, gaseous):**

Not applicable.

• **Auto/Self-ignition temperature:**

Not determined.

• **Decomposition temperature:**

Not determined.

• **Self-igniting:**

Product is not self-igniting.

• **Danger of explosion:**

Product does not present an explosion hazard.

• **Explosion limits:**

Lower:

Not determined.

Upper:

Not determined.

• **Vapour pressure:**

Not determined.

• **Density at 20 °C:**

1,056 g/cm<sup>3</sup>

• **Relative density**

Not determined.

• **Vapour density**

Not determined.

• **Evaporation rate**

Not determined.

• **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

(Contd. on page 9)



# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 8)

- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - Dynamic:** Not determined.
  - Kinematic:** Not determined.
- **Solvent content:**
  - Organic solvents:** Not determined.
  - Solids content:** Not determined.
- **9.2 Other information** No further relevant information available.

## 10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with oxidizing agents.  
Reacts with strong alkali.  
Reacts with catalysts.  
Reacts with peroxides and other radical forming substances.  
Toxic fumes may be released if heated above the decomposition point.
- **10.4 Conditions to avoid** Store away from oxidizing agents.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
Carbon monoxide and carbon dioxide  
Hydrocarbons  
Hydrogen chloride (HCl)

## 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

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

### 75-35-4 1,1-dichloroethylene

Inhalative	LC50/4h	6350 mg/l (mouse)
------------	---------	-------------------

### 107-13-1 acrylonitrile

Oral	LD50	78 mg/kg (rat)
Dermal	LD50	250 mg/kg (rabbit)
Inhalative	LC50/4h	425 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.

(Contd. on page 10)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 9)

- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant  
Toxic and/or corrosive effects may be delayed up to 24 hours.  
Suspected of causing cancer.  
Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.
- **Acute effects (acute toxicity, irritation and corrosivity):** Danger through skin adsorption.
- **Repeated dose toxicity:**  
May cause damage to organs through prolonged or repeated exposure.  
Repeated exposures may result in skin and/or respiratory sensitivity.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**  
Carc. 2

## 12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**  
The material is harmful to the environment.  
Toxic for aquatic organisms
- **12.2 Persistence and degradability** The product is partially biodegradable. Significant residuals remain.
- **12.3 Bioaccumulative potential** May be accumulated in organism
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
This statement was deduced from the properties of the single components.  
Avoid transfer into the environment.  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Danger to drinking water if even extremely small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

(Contd. on page 11)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 10)

## 13 Disposal considerations

### 13.1 Waste treatment methods

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Can be disposed of with household garbage after solidification following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

#### Uncleaned packaging:

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

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

### 14.1 UN-Number

#### DOT

Not Regulated

#### ADR, IMDG, IATA

UN3082

### 14.2 UN proper shipping name



Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 5 L (1.3 gal).

#### DOT

Not Regulated

#### ADR

3082 ENVIRONMENTALLY HAZARDOUS  
SUBSTANCE, LIQUID, N.O.S. (Mixed Epoxy Resin)  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (Mixed Epoxy Resin)

#### IMDG, IATA

### 14.3 Transport hazard class(es)

#### DOT

#### Class

Not Regulated

#### ADR



#### Class

9 (M6) Miscellaneous dangerous substances and  
articles.

#### Label

9

(Contd. on page 12)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 11)

## · IMDG



- Class
- Label

9 Miscellaneous dangerous substances and articles.  
9

## · IATA



- Class
- Label
- 14.4 Packing group
- DOT
- ADR, IMDG, IATA
- 14.5 Environmental hazards:
- Marine pollutant:
- Special marking (ADR):
- Special marking (IATA):
- 14.6 Special precautions for user

9 Miscellaneous dangerous substances and articles.  
9

Not Regulated  
III

Yes  
Symbol (fish and tree)  
Symbol (fish and tree)  
Warning: Miscellaneous dangerous substances and articles.

- Danger code (Kemler):
- EMS Number:
- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

90  
F-A,S-F

Not applicable.

## · Transport/Additional information:

- ADR
- Limited quantities (LQ)
- Transport category
- Tunnel restriction code
- UN "Model Regulation":

5L  
3  
E  
UN3082, ENVIRONMENTALLY HAZARDOUS  
SUBSTANCE, LIQUID, N.O.S. (Mixed Epoxy Resin), 9,  
III

## 15 Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
- SARA

## · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

(Contd. on page 13)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 12)

· **Section 313 (Specific toxic chemical listings):**

75-35-4 | 1,1-dichloroethylene

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65 (California):**

· **Chemicals known to cause cancer:**

Present in trace quantities.

107-13-1 | acrylonitrile

106-89-8 | 1-chloro-2,3-epoxypropane

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

Present in trace quantities.

106-89-8 | 1-chloro-2,3-epoxypropane

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic Categories**

· **EPA (Environmental Protection Agency)**

75-35-4 | 1,1-dichloroethylene

C, S (inh.), I (oral)

· **IARC (International Agency for Research on Cancer)**

75-35-4 | 1,1-dichloroethylene

3

· **TLV (Threshold Limit Value established by ACGIH)**

75-35-4 | 1,1-dichloroethylene

A4

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

75-35-4 | 1,1-dichloroethylene

· **Canada**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

75-35-4 | 1,1-dichloroethylene

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is listed.

· **15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.**

(Contd. on page 14)

# Safety Data Sheet

according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

Trade name: Valtron AD4110-A

(Contd. of page 13)

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### Relevant phrases

- H220 Extremely flammable gas.
- H224 Extremely flammable liquid and vapour.
- H280 Contains gas under pressure; may explode if heated.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H351 Suspected of causing cancer.
- H411 Toxic to aquatic life with long lasting effects.
- R12 Extremely flammable.
- R20 Harmful by inhalation.
- R36/38 Irritating to eyes and skin.
- R40 Limited evidence of a carcinogenic effect.
- R43 May cause sensitisation by skin contact.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### Abbreviations and acronyms:

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- ACGIH: American Conference of Governmental Industrial Hygienists
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- WHMIS: Workplace Hazardous Materials Information System (Canada)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Flam. Gas 1: Flammable gases, Hazard Category 1
- Press. Gas: Gases under pressure: Compressed gas
- Flam. Liq. 1: Flammable liquids, Hazard Category 1
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
- Carc. 2: Carcinogenicity, Hazard Category 2
- Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

### Sources

- SDS Prepared by:
- ChemTel Inc.
- 1305 North Florida Avenue
- Tampa, Florida USA 33602-2902
- Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573

(Contd. on page 15)

**Safety Data Sheet**  
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and  
GHS

Printing date 29.04.2014

Revision: 29.04.2014

**Trade name: Valtron AD4110-A**

Website: [www.chemtelinc.com](http://www.chemtelinc.com)

(Contd. of page 14)

