

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 30.01.2017



Version number 11

Revision: 30.01.2017

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

- **1.1 Product identifier**
 - **Trade name: GC11A**
 - **Article number:** 3350100004A
 - **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** Adhesives
 - **1.3 Details of the supplier of the safety data sheet**
 - **Supplier:**
Alfa Laval Lund AB
Box 74
SE-221 00 Lund
Sweden
+46 46 36 65 00
info.se@alfalaval.com
 - **Further information obtainable from:**
For further questions regarding the safety data sheet, please contact your local Alfa Laval Sales Company which you find at www.alfalaval.com or in section 16 "Other Information" in the end of the safety data sheet
 - **1.4 Emergency telephone number:**
For immediate, life-threatening emergencies, call 999
For health advice and information (24h) dial 111 (NHS direct).
- In Europe: Call 112 and ask for poison information.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.
Skin Sens. 1 H317 May cause an allergic skin reaction.
- **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**

GHS05 GHS07
- **Signal word** Danger
- **Hazard-determining components of labelling:**
3,3'-oxybis(ethyleneoxy)bis(propylamine)
2-piperazin-1-ylethylamine
- **Hazard statements**
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

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- **Precautionary statements**

- P260 Do not breathe vapours.

- P280 Wear protective gloves/protective clothing/eye protection/face protection.

- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

- P310 Immediately call a POISON CENTER/doctor/.

- P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

- **2.3 Other hazards** Contains 1-piperazinethanamine. May produce an allergic reaction.

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**

- **Description:**

- Mixture: consisting of the following components.

CAS: 67762-90-7	Dimethyl siloxane, reaction product with silicon oxide	2.5-<10%
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- **Dangerous components:**

CAS: 1332-58-7	Kaolin	25-50%
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	substance with a Community workplace exposure limit	
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CAS: 4246-51-9	3,3'-oxybis(ethyleneoxy)bis(propylamine)	25-50%
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EINECS: 224-207-2	Skin Corr. 1B, H314; Skin Sens. 1, H317	
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CAS: 90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	≤10%
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EINECS: 202-013-9	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319	
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CAS: 140-31-8	2-piperazin-1-ylethylamine	0.1-<1%
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EINECS: 205-411-0	Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Sens. 1, H317; Aquatic Chronic 3, H412	
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- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**

- **General information:**

- Immediately remove any clothing soiled by the product.

- Wash contaminated clothing before reuse.

- **After inhalation:** Supply fresh air; consult doctor if symptoms persists.

- **After skin contact:** Rinse with water for a longer time.

- **After eye contact:**

- IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- Remove contact lenses, if present and easy to do. Continue rinsing.

- Seek immediate medical advice.

- **After swallowing:**

- IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

- Call for a doctor immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** Refer to section 11.1

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- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
Use fire extinguishing methods suitable to surrounding conditions.
Water
Foam
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
CO₂
Nitrogen oxides (NO_x)
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Do not breathe vapour.
Wear protective equipment. Keep unprotected persons away.
Do not get in eyes, on skin, or on clothing.
Ensure adequate ventilation
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Send for recovery or disposal in suitable receptacles.
- **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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
When using do not eat, drink or smoke.
Avoid contact with skin and eyes.
Do not breathe vapour.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Keep away from heat and direct sunlight.

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- **Information about storage in one common storage facility:**
Do not store together with acids.
Store away from oxidising agents.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** Adhesives

SECTION 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:**

CAS: 1332-58-7 Kaolin

WEL	Long-term value: 2 mg/m ³
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- **DNELs**

4246-51-9 3,3'-oxybis(ethyleneoxy)bis(propylamine): Hazard via inhalation route: Long term exposure: 59 mg/m³, Most sensitive endpoint: Repeated dose toxicity.

90-72-2 Tris-2,4,6-dimethyl aminomethyl phenol: Hazard via inhalation route: Long term exposure: 0,31 mg/m³, Most sensitive endpoint: Irritation (respiratory tract).

140-31-8 1-Piperazinethaneamine: Hazard via inhalation route: Long term exposure: 3,6 mg/m³, Most sensitive endpoint: Repeated dose toxicity.

- **PNECs**

4246-51-9 3,3'-oxybis(ethyleneoxy)bis(propylamine): Aqua (freshwater): 0,22 mg/L, Assessment factor: 1000, Extrapolation method: Assessment factor.

90-72-2 Tris-2,4,6-dimethyl aminomethyl phenol: Aqua (freshwater): 0,084 mg/L, Assessment factor: 1000.

140-31-8 1-Piperazinethaneamine: Aqua (freshwater): 0,058 mg/L, Assessment factor: 1000.

- **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.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Ensure that washing facilities are available at the work place.

- **Respiratory protection:**

Filter P2

Filter P3



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

- **Protection of hands:**



Protective gloves

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

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- **Material of gloves** Butyl rubber, BR
- **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 goggles

- **Body protection:** Full protective clothing

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Highly viscous
Colour:	Whitish
Odour:	Amine-like
Odour threshold:	Not determined.

· pH-value: Not determined.

· Change in condition

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

· Flash point: > 150 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature:

Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

· Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

· Vapour pressure: Not determined.

· Density: Not determined.

· Relative density at 20 °C: 1.31 g/cm³

· Vapour density: Not determined.

· Evaporation rate: Not determined.

· Solubility in / Miscibility with water:

Slightly soluble.

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Dynamic at 20 °C: 0.6 mPas

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Kinematic: 9.2 Other information	Not determined. No further relevant information available.
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SECTION 10: Stability and reactivity

10.1 Reactivity

This product can be reactive with certain compounds under some circumstances - please see headings in this section.

10.2 Chemical stability Stable at environment temperature.

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid

Keep away from heat.

Avoid hardening of large quantities in order to prevent premature reaction (exotherm) with high heat and smoke.

10.5 Incompatible materials:

Store away from oxidising agents.

Keep away from acids.

10.6 Hazardous decomposition products:

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Nitrogen oxides

SECTION 11: Toxicological information

CAS: 90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Dermal	NOAEL	125 mg/kg (rat) (28 days) target organ: skin, liver, nervous system
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CAS: 140-31-8 2-piperazin-1-ylethylamine

Oral	NOAEL	409 mg/kg (rat) (32 days) 32 days male rat
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11.1 Information on toxicological effects

Product, calculated ATE (dermal): 2000 - 3000 mg/kg

Product, calculated ATE (oral): > 5000 mg/kg

Acute toxicity

CAS: 1332-58-7 Kaolin

Oral	LD50	>15000 mg/kg (Worker)
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CAS: 4246-51-9 3,3'-oxybis(ethyleneoxy)bis(propylamine)

Oral	LD50	3160 mg/kg (rat)
Dermal	LD50	2500 mg/kg (rabbit)

CAS: 90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Oral	LD50	1000 mg/kg (rat)
Dermal	LD50	1280 mg/kg (rat)

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CAS: 140-31-8 2-piperazin-1-ylethylamine

Oral	LD50	1470 mg/kg (rat)
Dermal	LD50	880 mg/kg (rabbit)

Based on available data, the classification criteria are not met.

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**
Causes burns.
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Acute effects (acute toxicity, irritation and corrosivity)**
Ingestion: May cause damage to the intestinal canal and stomach.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information· **12.1 Toxicity****CAS: 4246-51-9 3,3'-oxybis(ethyleneoxy)bis(propylamine)**

LC50 | 220 mg/L (Fish) (96h)

CAS: 90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

LC50 | 175 mg/L (Fish) (experimental 96 hours)

CAS: 140-31-8 2-piperazin-1-ylethylamineLC50 | >100 mg/L (Salmon trout) (Experimental)
96 hours· **Aquatic toxicity:****CAS: 4246-51-9 3,3'-oxybis(ethyleneoxy)bis(propylamine)**

EC50 | 69 mg/L (Algae) (72h)

CAS: 140-31-8 2-piperazin-1-ylethylamineEC50 | >1000 mg/L (Algae) (experimental)
72 hours· **12.2 Persistence and degradability****CAS: 4246-51-9 3,3'-oxybis(ethyleneoxy)bis(propylamine)**Biodegradability | 12.6 weight % (No information available) (OECD 301C - MITI (I))
calculated biological decomposition
time: 28 days

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CAS: 90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Biodegradability	4 weight % (No information available) (Experimental) OECD 301D Closed Bottle Test biological oxygen consumption
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CAS: 140-31-8 2-piperazin-1-ylethylamine

Biodegradability	0 % (No information available) (OECD 301C - MITI (1)) 28 DAYS Experimental biological degradability
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· **12.3 Bioaccumulative potential****CAS: 4246-51-9 3,3'-oxybis(ethyleneoxy)bis(propylamine)**

Bioaccumulation factor	-1.46 (No information available) (calculated bioconcentration) Log P octanol/water
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CAS: 90-72-2 2,4,6-tris(dimethylaminomethyl)phenol

Bioaccumulation factor	-066 (No information available) (Experimental biokoncentration) Log Partition coefficient octanol/water
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CAS: 140-31-8 2-piperazin-1-ylethylamine

Bioaccumulation factor	0.3 (No information available) (experimental bioconcentration) Log P (octanol/water)
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· **12.4 Mobility in soil** No further relevant information available.· **Ecotoxicological effects:**· **Remark:**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxic for fish

· **12.5 Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **12.6 Other adverse effects** No further relevant information available.

SECTION 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.

· **European waste catalogue**

08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 04 00	wastes from MFSU of adhesives and sealants (including waterproofing products)
08 04 09*	waste adhesives and sealants containing organic solvents or other dangerous substances
20 00 00	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01 00	separately collected fractions (except 15 01)
20 01 27*	paint, inks, adhesives and resins containing dangerous substances

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- **Uncleaned packaging:**
- **Recommendation:**
 Disposal must be made according to official regulations.
 Packagings that may not be cleansed are to be disposed of in the same manner as the product.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, IMDG, IATA	UN3259
· 14.2 UN proper shipping name · ADR · IMDG, IATA	3259 AMINES, SOLID, CORROSIVE, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine), N-AMINOETHYLPIPERAZINE) AMINES, SOLID, CORROSIVE, N.O.S. (3,3'-oxybis(ethyleneoxy)bis(propylamine), N-AMINOETHYLPIPERAZINE)
· 14.3 Transport hazard class(es) · ADR  · Class · IMDG, IATA  · Class · Label	8 Corrosive substances. 8 Corrosive substances. 8
· 14.4 Packing group · ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · EMS Number: · Stowage Category · Segregation Code	Warning: Corrosive substances. FA, FB A SG35 Stow "separated from" acids.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.

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· Transport/Additional information:

· ADR

- Limited quantities (LQ)
- Excepted quantities (EQ)

1 kg
Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· Tunnel restriction code

DE

· IMDG

- Limited quantities (LQ)
- Excepted quantities (EQ)

1 kg
Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 3259 AMINES, SOLID, CORROSIVE, N.O.S.
(3 , 3 ' - O X Y B I S (E T H Y L E N E O X Y)
B I S (P R O P Y L A M I N E) , N -
AMINOETHYLPIPERAZINE), 8, II

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) no.1907/2006 (REACH)

EU regulation (EC) no 1272/2008 (CLP)

EC DIRECTIVE 2008/98/EC (waste)

- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

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

SECTION 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.

LIMITATION OF LIABILITY

This document is only intended to be used as guidance as regards the risks of which we are aware that are associated with the product. Every individual who works with the product or in close proximity of it must receive suitable training. Individuals who come into contact with the product must be capable of using their own judgement as regards conditions or methods for handling, storing and using the product. Alfa Laval is not liable for demands, losses or damage of any kind that arise from flaws or deficiencies in this document or from using, handling, storing or disposing of the product unless it can be proven that Alfa Laval has acted in a grossly negligent manner. Beyond what has been agreed upon and specified in writing with Alfa Laval in the individual case, Alfa Laval makes no promises or assumes any liability, including but not limited to implicit guarantees regarding marketability or appropriateness in terms of both the information provided in this document and the product to which the information refers.

Please contact your local Alfa Laval Sales Company for further questions:

· Relevant phrases

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

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H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** MACC -Materials & Chemistry Centre

· **Contact:**

Please contact your local Alfa Laval Sales Company for further questions:

Argentina: alfa.consulta@alfalaval.com

Australia: australia.info@alfalaval.com

Austria: info.mideurope@alfalaval.com

Belgium: benelux.info@alfalaval.com

Bolivia: alfa.consulta@alfalaval.com

Brazil: alfalaval.br@alfalaval.com

Bulgaria: bulgaria.info@alfalaval.com

Canada: alfacan.info@alfalaval.com

Chile: chile.informacion@alfalaval.com

China: china.info@alfalaval.com

Colombia: info.colombia@alfalaval.com

Croatia: hrvatska.info@alfalaval.com

Czech Republic: czechrepublic.info@alfalaval.com

Denmark: info.nordic.dk@alfalaval.com

Egypt: alme.marketing@alfalaval.com

Estonia: estonia.info@alfalaval.com

Finland: info.fi@alfalaval.com

France: environnement@alfalaval.com

Germany: info.mideurope@alfalaval.com

Greece: greece.info@alfalaval.com

Hungary: info.hu@alfalaval.com

India: india.info@alfalaval.com

Indonesia: alfalindo@alfalaval.com

Israel: israel.info@alfalaval.com

Italy: alfalaval.italia@alfalaval.com

Latvia: latvia.info@alfalaval.com

Lithuania: lithuania.info@alfalaval.com

Malaysia: malaysia.info@alfalaval.com

Mexico: mexico.info@alfalaval.com

The Netherlands: benelux.info@alfalaval.com

New Zealand: newzealand.info@alfalaval.com

Norway: info.no@alfalaval.com

Peru: ventas.peru@alfalaval.com

Philippines: philippines.info@alfalaval.com

Poland: poland.info@alfalaval.com

Portugal: portugal.info@alfalaval.com

Qatar: alme.marketing@alfalaval.com

Romania: romania.info@alfalaval.com

Russia: moscow.response@alfalaval.com

Singapore: al.singapore@alfalaval.com

Slovak Republic: slovakia.info@alfalaval.com

Slovenia: slovenija.info@alfalaval.com

South Africa: info.sa@alfalaval.com

Spain: info.spain@alfalaval.com

Sweden: info.se@alfalaval.com

Switzerland: info.mideurope@alfalaval.com

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Taiwan: taiwan.info@alfalaval.com
Thailand: thailand.info@alfalaval.com
Turkey: turkey@alfalaval.com
Ukraine: ukraine.info@alfalaval.com
United Arab Emirates: alme.marketing@alfalaval.com
United Kingdom: general.uk@alfalaval.com
United States: customerservice.usa@alfalaval.com
Venezuela: venezuela.info@alfalaval.com
Vietnam: vietnam.info@alfalaval.com

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
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
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)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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

GB