

Ardrox 9881

Version: 5.0

Revision Date 12.04.2013

Print Date 17.03.2015

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

1.1 Product identifier

Trade name : Ardrox 9881

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-
stance/Mixture : Emulsifier
Recommended restrictions
on use : None known.

1.3 Details of the supplier of the safety data sheet

Company : Chemetall Ltd
Denbigh Road
Bletchley Milton Keynes MK1 1PB
Telephone : 01908 649333
Telefax : 01908 373939

Contact person product safety
Telephone : +49(0)6971652832
E-mail address : msds.de@chemetall.com

1.4 Emergency telephone number

Emergency telephone
number : 01908 649333

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4	H302: Harmful if swallowed.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

Classification (67/548/EEC, 1999/45/EC)

Harmful	R22: Harmful if swallowed.
Irritant	R41: Risk of serious damage to eyes.
Dangerous for the environment	R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P262 Do not get in eyes, on skin, or on clothing.
P280 Wear protective gloves/ eye protection/ face protection.
P273 Avoid release to the environment.
Response:
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 IF exposed or concerned:
P310 Immediately call a POISON CENTER or doctor/ physician.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

- 68439-45-2 Alcohol ethoxylate

Labelling according to EC Directives (1999/45/EC)

Hazard pictograms :



Harmful

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R-phrases(s)	: R22 R41 R52/53	Harmful if swallowed. Risk of serious damage to eyes. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases(s)	: S23 S24/25 S26 S36/37/39 S61	Do not breathe gas/fumes/vapour/spray. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Hazardous components which must be listed on the label:

- 68439-45-2 Alcohol ethoxylate

2.3 Other hazards

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Chemical nature : Emulsifier

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Alcohol ethoxylate	68439-45-2	Xn; R22 Xi; R41	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 25 - < 50
N-oleoylsarcosine	110-25-8 203-749-3	Xn; R20-R38- R41 N; R50	Acute Tox. 4; H332 Skin Irrit. 2; H315	>= 3 - < 5

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			Eye Dam. 1; H318 Aquatic Acute 1; H400	
1,3-bis(hydroxymethyl)- 5,5- dimethylimidazolidine- 2,4-dione	6440-58-0 229-222-8	Xn; R22	Acute Tox. 4; H302	>= 1 - < 2.5
2-Amino-2- methylpropanol	124-68-5 204-709-8	Xi; R36/38 R52-R53	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Aquatic Chronic 3; H412	>= 1 - < 2.5
3-iodo-2-propynyl bu- tylcarbamate	55406-53-6 259-627-5	Xi; R36/38 Xn; R22 N; R50/53	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Acute Tox. 4; H302 Aquatic Chronic 1; H410	>= 0.025 - < 0.1

For the full text of the R-phrases mentioned in this Section, see Section 16.

For the full text of the H-Statements mentioned in this Section, see Section 16.

For the full text of the Notas mentioned in this Section, see Section 16.

SECTION 4: First aid measures**4.1 Description of first aid measures**

General advice : First-aid crew: Ensure self-protection.
Move out of dangerous area.
Take off contaminated clothing and shoes immediately.

If inhaled : Move to fresh air.

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- If symptoms persist, call a physician.
- In case of skin contact : Wash off with soap and plenty of water.
If symptoms persist, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids.
Consult a physician.
- If swallowed : Rinse mouth with water.
Do NOT induce vomiting.
Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.
- Risks : irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.
For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Carbon dioxide (CO₂)
Dry powder
Alcohol-resistant foam
Water spray
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

- Specific hazards during fire-fighting : May form toxic gases on heating or in case of fire.
Carbon monoxide
Carbon dioxide (CO₂)
nitrogen oxides (NO_x)

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.
- Further information :

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Ensure adequate ventilation.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

See chapter 8 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Have eye wash bottle or eye rinse ready at the work place.

Advice on protection against fire and explosion : Take precautionary measures against static discharges.
Normal measures for preventive fire protection.
Keep away from sources of ignition - No smoking.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep containers tightly closed in a dry, cool and well-ventilated place.
Store in a place accessible by authorized persons only.

German storage class : 10 Combustible liquids

Storage period : 36 month

Storage temperature : 5 - 40 °C

7.3 Specific end uses

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Specific use(s) : Emulsifier

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.
Recommended Filter type:
A-P2

Hand protection : Neoprene gloves
Rubber gloves
Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves have to be replaced at the first sign of deterioration.

Eye protection : Eye protection (EN 166)
Tightly fitting safety goggles

Skin and body protection : Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

Hygiene measures : Take off contaminated clothing and shoes immediately.
Keep away from food, drink and animal feedingstuffs.
Wash hands before breaks and immediately after handling the product.
Avoid contact with skin and eyes.
Do not breathe vapour.
Do not breathe spray.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

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Inform the relevant authorities if it enters sewers, aquatic environment or soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: light pink
Odour	: characteristic
Flash point	: > 93 °C
pH	: 8.7 at 100 g/l 20 °C
Density	: 1.01 g/cm ³ at 20 °C
Water solubility	: completely miscible
Viscosity, kinematic	: 32 mm ² /S at 40 °C

9.2 Other information

Explosivity	: no explosion risk
Directive 1999/13/EC on the limitation of emissions of volatile organic compounds	: Value: 0 g/l

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

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10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

10.4 Conditions to avoid

Conditions to avoid : Protect from frost, heat and sunlight.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Risk of decomposition. : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity : Acute toxicity estimate: 1,188 mg/kg
Method: Calculation method

Acute oral toxicity
Alcohol ethoxylate : LD50: 300 - 2,000 mg/kg
Species: rat

N-oleoylsarcosine : LD50: 9,200 mg/kg
Species: rat

2-Amino-2-methylpropanol : LD50: 2,900 mg/kg
Species: rat

3-iodo-2-propynyl butylcarbamate : LD50: 1,795 mg/kg
Species: rat

LD50: 1,056 mg/kg
Species: rat

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l
vapour
Method: Calculation method

Acute inhalation toxicity
N-oleoylsarcosine : LC50: 1.37 mg/l

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Exposure time: 4 h
Species: rat

Acute dermal toxicity
Alcohol ethoxylate : LD50: > 2,000 mg/kg
Species: rat

2-Amino-2-methylpropanol : LD50: > 2,000 mg/kg
Species: rabbit

Skin corrosion/irritation

Skin irritation : May cause skin irritation in susceptible persons.

Skin irritation
N-oleoylsarcosine : Causes skin irritation.

3-iodo-2-propynyl butylcarbamate : Irritating to skin.

Serious eye damage/eye irritation

Eye irritation : Causes serious eye damage.

Eye irritation
3-iodo-2-propynyl butylcarbamate : Severe eye irritation

Respiratory or skin sensitisation

Sensitisation : no data available

Sensitisation
N-oleoylsarcosine : Method: OECD Test Guideline 429
Did not cause sensitisation on laboratory animals.

Toxicology Assessment

Acute effects : Harmful if swallowed.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicology studies for the product are not available.

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Toxicity to fish

Alcohol ethoxylate : LC50: > 10 - 100 mg/l
Species: Fish

N-oleoylsarcosine : static test LC50: 3.2 - 4.6 mg/l
Exposure time: 96 h
Species: Leuciscus idus (Golden orfe)
Method: DIN 38412

2-Amino-2-methylpropanol : LC50: 190 mg/l
Exposure time: 96 h
Species: Lepomis macrochirus (Bluegill sunfish)

3-iodo-2-propynyl butylcarbamate : LC50: 0.067 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates

Alcohol ethoxylate : LC50: > 1 - 10 mg/l
Species: Daphnia

N-oleoylsarcosine : static test EC50: 0.53 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

2-Amino-2-methylpropanol : EC50: 65 mg/l
Exposure time: 24 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

3-iodo-2-propynyl butylcarbamate : EC50: 0.16 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

Toxicity to algae

Alcohol ethoxylate : EC50: > 10 - 100 mg/l

N-oleoylsarcosine : static test EC50: 5.1 mg/l
Exposure time: 72 h
Species: Scenedesmus subspicatus

2-Amino-2-methylpropanol : IC50: 520 mg/l
Exposure time: 72 h
Species: Desmodesmus subspicatus
Method: OECD Test Guideline 201

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Toxicity to bacteria
N-oleoysarcosine : EC20: 50 mg/l
Exposure time: 0.5 h
Species: activated sludge

3-iodo-2-propynyl butylcarbamate : EC50: 44 mg/l
Exposure time: 3 h
Species: activated sludge

12.2 Persistence and degradability

Biodegradability : no data available

Biodegradability
N-oleoysarcosine : Readily biodegradable

12.3 Bioaccumulative potential

Bioaccumulation : no data available

Bioaccumulation
N-oleoysarcosine : Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

12.4 Mobility in soil

Distribution among environmental compartments : no data available

12.5 Results of PBT and vPvB assessment

This mixture does not contain substances considered to be persistent, bioaccumulating and toxic (PBT)., This mixture does not contain substances considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

Additional ecological information : water endangering
Harmful to aquatic life with long lasting effects.
Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
Even leakage of small amounts in the subsoil can contaminate drinking water.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Product : Dispose of in accordance with local regulations.
- Contaminated packaging : Dispose of as unused product.
- Waste Code : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

SECTION 14: Transport information

ADR

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID

Not dangerous goods

SECTION 15: Regulatory information

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

- Candidate List of Substances of Very High Concern for Authorisation : This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).
- Water contaminating class (Germany) : WGK 2 water endangering
VWVWS A4
- Other regulations : The product is classified and labelled in accordance with EC directives or respective national laws.
Regional or national implementations of GHS may not implement all hazard classes and categories.

15.2 Chemical Safety Assessment

For the lead substance(s) in the mixture, there is no exposure scenario available.

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For a mixture it is not mandatory to include an exposure scenario in the material safety data sheet. The necessary safety - related information is stated in the first 16 sections.

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R20	Harmful by inhalation.
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R41	Risk of serious damage to eyes.
R50	Very toxic to aquatic organisms.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52	Harmful to aquatic organisms.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

| This data sheet contains changes from the previous version in section(s): 14