

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

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

1.1 Product identifier

Trade name : Ardrox AV 100D

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

Use of the Sub- : Corrosion inhibitor
stance/Mixture

Recommended restrictions : None known.
on use

1.3 Details of the supplier of the safety data sheet

Company : Chemetall GmbH
Trakehner Strasse 3
60487 Frankfurt a.M.

Lead Organisation : Surface Treatment
Telephone : +49(0)69 7165-0
Telefax : +49(0)69 7165-3567

Contact person product safety
Telephone : +49(0)6971653581
E-mail address : msds.de@chemetall.com

1.4 Emergency telephone number

Emergency telephone : +49(0)5326 51-0
number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable liquids, Category 3	H226: Flammable liquid and vapour.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Aspiration hazard, Category 1	H304: May be fatal if swallowed and enters air-ways.
Chronic aquatic toxicity, Category 3	H412: Harmful to aquatic life with long lasting effects.

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

Flammable R10: Flammable.

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Dangerous for the environment

R52/53: Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements :

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements :

Prevention:	
P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P262	Do not get in eyes, on skin, or on clothing.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:	
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
Disposal:	
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

- Hydrocarbons, C9-C11, cyclics, < 2% aromatics

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

R-phrases(s) : R10 Flammable.

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

	R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrases(s)	: S16	Keep away from sources of ignition - No smoking.
	S23	Do not breathe gas/fumes/vapour/spray.
	S24/25	Avoid contact with skin and eyes.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S60	This material and its container must be disposed of as hazardous waste.
	S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

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 : Mixture of organic solvents.

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Hydrocarbons, C9-C11, cyclics, < 2% aromatics	925-894-8 01-2119472436-34	R10 Xn; R65 N; R51/53 Xi; R38 R67 Nota H, Nota P	Asp. Tox. 1; H304 Flam. Liq. 3; H226 Aquatic Chronic 2; H411 Skin Irrit. 2; H315 STOT SE 3; H336	>= 10 - < 15

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Naphtha (petroleum), hydrotreated heavy (benzene < 0,1 %)	64742-48-9 265-150-3	R10 Xn; R65 R66 Nota H, Nota P	Asp. Tox. 1; H304 Flam. Liq. 3; H226	>= 10 - < 25
Barium bis(dinonylnaphthalene sulphonate)	25619-56-1 247-132-7	Xn; R20/22 Xi; R36/38 Nota A	Acute Tox. 4; H332 Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Irrit. 2; H315	>= 3 - < 5
2,2'-(octadec-9- enylimino)bisethanol	25307-17-9 246-807-3 01-2119510876-35	C; R34 Xn; R22 N; R50	Acute Tox. 4; H302 Skin Corr. 1B; H314 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor:10	>= 1 - < 2.5

WEL substance :

Paraffin waxes	8002-74-2 232-315-6		Not a hazard- ous substance or mixture ac- cording to Reg- ulation (EC) No. 1272/2008.	>= 10 - < 25
Limestone	1317-65-3		Not a hazard-	>= 10 - < 25

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

	215-279-6		ous substance or mixture ac- cording to Reg- ulation (EC) No. 1272/2008.	
--	-----------	--	--	--

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.
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 : Aspiration hazard.
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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

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 : Use water spray to cool unopened containers.

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.

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.
To avoid risks to man and the environment, comply with the

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

instructions for use.

Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.
Normal measures for preventive fire protection.
Take precautionary measures against static discharges.
Vapours may form explosive mixtures with air.

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.
Protect from direct sunlight.

Storage period : 36 month

Storage temperature : 4 - 38 °C

7.3 Specific end use(s)

Specific use(s) : Corrosion inhibitor

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Paraffin waxes	8002-74-2	TWA	2 mg/m3 Fumes	2011-12-01	GB EH40
Further information	: 48: The word 'fume' is often used to include gases and vapours. This is not the case for exposure limits where 'fume' should normally be applied to solid particles generated by chemical reactions or condensed from the gaseous state, usually after volatilisation from melted substances. The generation of fume is often accompanied by a chemical reaction such as oxidation or thermal breakdown.				
	8002-74-2	STEL	6 mg/m3 Fumes	2011-12-01	GB EH40
Further information	: 48: The word 'fume' is often used to include gases and vapours. This is not the case for exposure limits where 'fume' should normally be applied to solid particles generated by chemical reactions or condensed from the gaseous state, usually after volatilisation from melted substances. The generation of fume is often accompanied by a chemical reaction such as oxidation or thermal breakdown.				

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Limestone	1317-65-3	TWA	10 mg/m3 inhalable dust	2011-12-01	GB EH40
Further information	<p>: 15: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust</p> <p>The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit.</p> <p>Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.</p> <p>Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3.</p> <p>Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with.</p> <p>Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>				
	1317-65-3	TWA	4 mg/m3 Res- pirable dust	2011-12-01	GB EH40
Further information	<p>: 15: For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust</p> <p>The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit.</p> <p>Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed 'inhalable' and 'respirable'.</p> <p>Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3.</p> <p>Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with.</p> <p>Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used</p>				

DNEL/DMEL

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Hydrocarbons, C9-C11, cyclics, < 2% aromatics : End Use: DNEL, Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 300 mg/kg bw/d

End Use: DNEL, Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 1500 mg/m³

2,2'-(octadec-9-enylimino)bisethanol : End Use: DNEL, Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 0.25 mg/kg bw/d

End Use: DNEL, Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 1.76 mg/m³

PNEC

2,2'-(octadec-9-enylimino)bisethanol : Fresh water
Value: 0.000214 mg/l

Marine water
Value: 0.000021 mg/l

Behaviour in waste water treatment plants
Value: 1.5 mg/l

Fresh water sediment
Value: 1.692 mg/kg dry weight (d.w.)

Marine sediment
Value: 0.1692 mg/kg dry weight (d.w.)

Soil
Value: 5 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.
Electrical equipment should be protected to the appropriate standard.
Use only explosion-proof equipment.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation wear suitable respiratory

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

- equipment.
Recommended Filter type:
A-P2
- Hand protection : Nitrile rubber
butyl-rubber
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.
- 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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance : liquid thixotropic
- Colour : beige
- Odour : solvent-like
- Flash point : 47 °C
Method: ASTM D 93
- pH : Not applicable
- Boiling point/boiling range : 150 - 200 °C

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Density : 0.99 g/cm³
at 20 °C

Water solubility : insoluble

Viscosity, kinematic : > 20 mm²/S
at 40 °C

9.2 Other information

Explosivity : Vapours may form explosive mixture with air.

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds : Value: 257 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.

10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

10.4 Conditions to avoid

Conditions to avoid : To avoid thermal decomposition, do not overheat.
Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Materials to avoid : Strong oxidizing agents

10.6 Hazardous decomposition products

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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

- Acute oral toxicity : Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method
- Acute oral toxicity
Hydrocarbons, C9-C11, cyclics, < 2% aromatics : LD50: > 5,000 mg/kg
Species: Rat
Method: OECD Test Guideline 401
- Naphtha (petroleum), hydrotreated heavy (benzene < 0,1 %)
Barium bis(dinonylnaphthalenesulphonate)
2,2'-(octadec-9-enylimino)bisethanol : LD50: > 5,000 mg/kg
Species: Rat
Acute toxicity estimate: 500 mg/kg
Method: Converted acute toxicity point estimate
LD50: > 300 - 2,000 mg/kg
Species: Rat
Method: OECD Test Guideline 401
- Paraffin waxes : LD50: > 5,000 mg/kg
Species: Rat
- Limestone : LD50: > 5,000 mg/kg
Species: Rat
- Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l vapour
Method: Calculation method
- Acute inhalation toxicity
Hydrocarbons, C9-C11, cyclics, < 2% aromatics : LC50: 4,951 mg/l
Exposure time: 4 h
Species: Rat
Method: OECD Test Guideline 403
- Acute dermal toxicity
Hydrocarbons, C9-C11, cyclics, < 2% aromatics : LD50: > 5,000 mg/kg
Species: Rabbit
Method: OECD Test Guideline 402

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Naphtha (petroleum), hydrotreated heavy (benzene < 0,1 %)

: LD50: > 2,000 mg/kg
Species: Rabbit

Paraffin waxes

: LD50: > 2,000 mg/kg
Species: Rabbit

Skin corrosion/irritation

Skin irritation : Causes skin irritation.

Serious eye damage/eye irritation

Eye irritation : Causes serious eye irritation.

Respiratory or skin sensitisation

Sensitisation : No data available

Aspiration hazard

Aspiration toxicity : May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicology studies for the product are not available.

Toxicity to fish

Hydrocarbons, C9-C11, cyclics, < 2% aromatics : LC50: 3.6 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

2,2'-(octadec-9-enylimino)bisethanol : LC50: > 0.1 - 1 mg/l
Exposure time: 96 h
Species: Brachydanio rerio (Zebra danio)
Method: OECD Test Guideline 203

Limestone : LC50: > 10,000 mg/l
Exposure time: 96 h
Species: Fish

Toxicity to daphnia and other aquatic invertebrates

Hydrocarbons, C9-C11, cyclics : EC50: 22 - 46 mg/l

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

clics, < 2% aromatics	Exposure time: 48 h Species: Daphnia magna (Water flea)
2,2'-(octadec-9-enylimino)bisethanol	: EC50: > 0.001 - 0.01 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202 GLP: yes EC100: > 0.001 - 0.01 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
Limestone	: LC50: > 1,000 mg/l Exposure time: 48 h Species: Daphnia (water flea)
Toxicity to algae Hydrocarbons, C9-C11, cyclics, < 2% aromatics	: EC50: > 1,000 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae)
2,2'-(octadec-9-enylimino)bisethanol	: EC50: > 0.001 - 0.01 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae) Method: OECD Test Guideline 201
Limestone	: : > 200 mg/l Exposure time: 72 h Species: Algae

12.2 Persistence and degradability

Biodegradability : No data available

Biodegradability
2,2'-(octadec-9-enylimino)bisethanol : Method: OECD Test Guideline 301D
GLP: yes
This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Readily biodegradable

12.3 Bioaccumulative potential

Bioaccumulation : Bioaccumulation is unlikely.

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

Chemical Oxygen Demand (COD)
2,2'-(octadec-9-enylimino)bisethanol : 3,880 mg/g
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.

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
UN number : 1139
UN proper shipping name : COATING SOLUTION
Transport hazard class(es) : 3
Packing group : III
Classification Code : F1

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Hazard Identification Number : 30
Limited Quantity (LQ) Inner : 5.00 L
Packaging
Maximum quantity : 30.00 KG
Labels : 3
Tunnel restriction code : (D/E)
Environmentally hazardous : no
Special Provision 640E

IATA

UN number : 1139
Description of the goods : Coating solution
Class : 3
Packing group : III
Labels : 3

IATA_C

Packing instruction (cargo aircraft) : 366
Packing instruction (LQ) : Y344
Maximum quantity : 220.00 L
Environmentally hazardous : no

IATA_P

Packing instruction (passenger aircraft) : 355
Packing instruction (LQ) : Y344
Maximum quantity : 60.00 L
Environmentally hazardous : no

IMDG

UN number : 1139
Description of the goods : COATING SOLUTION
Class : 3
Packing group : III
Labels : 3
EmS Number 1 : F-E
EmS Number 2 : S-E
Marine pollutant : no
"IMDG-Code segregation group not applicable".

"IMDG-Code segregation group not applicable".

RID

UN number : 1139
Description of the goods : COATING SOLUTION
Transport hazard class(es) : 3

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Packing group	:	III
Classification Code	:	F1
Hazard Identification Number	:	30
Labels	:	3
Limited Quantity (LQ) Inner Packaging	:	5.00 L
Maximum quantity	:	30.00 KG
Environmentally hazardous	:	no

Special Provision 640E

SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	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 VVVWS 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 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

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

R10	Flammable.
R20/22	Harmful by inhalation and if swallowed.
R22	Harmful if swallowed.
R34	Causes burns.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R50	Very toxic to aquatic organisms.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

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

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of Notas referred to under section 3

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Chemetall
expect more⁺

Ardrox AV 100D

Version: 8.2

Revision Date 02.05.2013

Print Date 23.04.2015

Nota A The name of the substance must appear on the label in the form of one of the designations given in Annex I (see Article 23(2)(a)). In Annex I, use is sometimes made of a general description such as compounds or salt. In this case, the manufacturer or any other person who markets such a substance is required to state on the label the correct name, due account being taken of the chapter entitled Nomenclature of the Foreword: Example: for BeCl₂ (Einecs No 232-116-4): beryllium chloride. The Directive also requires that the symbols, indications of danger, R- and S-phrases to be used for each substance shall be those shown in Annex I (Article 23(2)(c), (d) and (e)). For substances belonging to one particular group of substances included in Annex I, the symbols, indications of danger, R- and S-phrases to be used for each substance shall be those shown in the appropriate entry in Annex I. For substances belonging to more than one group of substances included in Annex I, the symbols, indications of danger, R- and S-phrases to be used for each substance shall be those shown in both the appropriate entries given in Annex I. In cases where two different classifications are given in the two entries for the same hazard, the classification reflecting the more severe hazard classification is used. Example: for substance AB - no individual entry in Annex I: Annex I group entry for compounds of A: Repr. Cat. 1; R61 Repr. Cat. 3; R62 Xn; R20/22 R33 N; R50-53 Annex I group entry for compounds of B: Carc. Cat.1; R45 T; R23/25 N; R51-53 Classification of substance AB thus becomes: Carc. Cat. 1; R45 Repr. Cat. 1; R61 Repr. Cat. 3; R62 T; R23/25 R33 N; R50-53.

Nota H The classification and label shown for this substance applies to the dangerous property(ies) indicated by the risk phrase(s) in combination with the category(ies) of danger shown. The manufacturers, importers and downstream users of this substance shall be obliged to carry out an investigation to make themselves aware of the relevant and accessible data which exists for all other properties to classify and label the substance. The final label shall follow the requirements of section 7 of Annex VI of this Directive.

Nota P The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7). When the substance is classified as a carcinogen or mutagen, Note E shall also apply. When the substance is not classified as a carcinogen or mutagen at least the S-phrases (2-)23-24-62 shall apply. This note applies only to certain complex oil-derived substances in Annex I.

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): 3