

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Ardrox 8903W Aerosol

Version: 3.0

Revision Date 01.10.2013

Print Date 13.03.2014

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

1.1 Product identifier

Trade name : Ardrox 8903W Aerosol

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

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

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 : 01908 649333
number

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Flammable aerosols, Category 1	H222: Extremely flammable aerosol.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Specific target organ toxicity - single exposure, Category 3	H336: May cause drowsiness or dizziness.

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

Extremely flammable	R12: Extremely flammable.
Irritant	R36: Irritating to eyes.
	R67: Vapours may cause drowsiness and dizziness.

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R66: Repeated exposure may cause skin dryness or cracking.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

:



Signal word

: Danger

Hazard statements

:

H222
H319
H336

Extremely flammable aerosol.
Causes serious eye irritation.
May cause drowsiness or dizziness.

:

EUH066

Repeated exposure may cause skin dryness or cracking.

Precautionary statements

:

Prevention:

P210

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P243

Take precautionary measures against static discharge.

P260

Do not breathe spray.

P262

Do not get in eyes, on skin, or on clothing.

P271

Use only outdoors or in a well-ventilated area.

P280

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

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ 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.

P308 + P313

IF exposed or concerned: Get medical advice/ attention.

Disposal:

P501

Dispose of contents/ container to an approved waste disposal plant.

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Chemetall
expect more⁺

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Hazardous components which must be listed on the label:

- 67-64-1 Acetone

Additional Labelling:

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C.

Do not spray on a naked flame or any incandescent material.

Do not pierce or burn, even after use.

S16 Keep away from sources of ignition - No smoking.

S 2 Keep out of the reach of children.

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

Hazard pictograms

:



Extremely
flammable



Irritant

R-phrases(s)

:

R12

Extremely flammable.

R36

Irritating to eyes.

R66

Repeated exposure may cause skin dryness or cracking.

R67

Vapours may cause drowsiness and dizziness.

S-phrases(s)

:

S16

Keep away from sources of ignition - No smoking.

S23

Do not breathe spray.

S24/25

Avoid contact with skin and eyes.

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S33

Take precautionary measures against static discharges.

S36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

S51

Use only in well-ventilated areas.

S60

This material and its container must be disposed of as hazardous waste.

Special labelling of certain mixtures

:

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 °C.

Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep away from sources of ignition - No smoking.

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Keep away from children.

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 [%]
Acetone	67-64-1 200-662-2 01-2119471330-49	F; R11 Xi; R36 R66 R67	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336	>= 25 - < 50
Propane	74-98-6 200-827-9 01-2119486944-21	F+; R12	Flam. Gas 1; H220 Press. Gas	>= 2.5 - < 10
1-ethoxypropan-2-ol	1569-02-4 216-374-5	R10 R67	Flam. Liq. 3; H226 STOT SE 3; H336 2; H319	>= 2.5 - < 10

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WEL substance :

Butane	106-97-8 203-448-7	F+; R12 Nota C	Flam. Gas 1; H220 Press. Gas	>= 10 - < 25
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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 : Giddiness and narcotic condition possible.
May cause drowsiness or dizziness.
- Risks : irritant effects
Repeated absorption may cause disorder of central nervous system, liver, kidneys and blood.

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.

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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)

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

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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.
Floor level ventilation required.
Have eye wash bottle or eye rinse ready at the work place.

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

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.

Storage temperature : < 50 °C

7.3 Specific end uses

Specific use(s) : Additive

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
Acetone	67-64-1	TWA	500 ppm 1,210 mg/m ³	2000-06-16	2000/39/EC
Further information	: Indicative				
	67-64-1	TWA	500 ppm 1,210 mg/m ³	2005-04-06	GB EH40
	67-64-1	STEL	1,500 ppm 3,620 mg/m ³	2005-04-06	GB EH40

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Butane	106-97-8	TWA	600 ppm 1,450 mg/m ³	2007-08-01	GB EH40
Further information	:	Carc: Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH. Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			
	106-97-8	STEL	750 ppm 1,810 mg/m ³	2007-08-01	GB EH40
Further information	:	Carc: Capable of causing cancer and/or heritable genetic damage. The identified substances include those which: - are assigned the risk phrases 'R45: May cause cancer'; 'R46: may cause heritable genetic damage'; 'R49: May cause cancer by inhalation' or - a substance or process listed in Schedule 1 of COSHH. Carcinogenic only applies if butane contains more than 0.1% of buta-1,3-diene			

DNEL/DMEL

Acetone

: End Use: DNEL, Workers
 Exposure routes: Inhalation
 Potential health effects: Long-term local effects
 Value: 1210 mg/m³

1-ethoxypropan-2-ol

: End Use: DNEL, Workers
 Exposure routes: Inhalation
 Potential health effects: Acute systemic effects
 Value: 317 mg/m³

End Use: DNEL, Workers
 Exposure routes: Inhalation
 Potential health effects: Long-term systemic effects
 Value: 211 mg/m³

PNEC

1-ethoxypropan-2-ol

: Fresh water
 Value: 10 mg/l

Fresh water sediment
 Value: 37.6 mg/kg

Soil

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Value: 2.4 mg/kg

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 equipment.
Recommended Filter type:
AX-P2 |
| Hand protection | : | Nitrile rubber
Neoprene gloves
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. |
|----------------|---|---|

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: aerosol
Colour	: white
Odour	: hydrocarbon-like
Flash point	: -18 °C Method: ASTM D 93 Active substance -60 °C Butane/Propane
Boiling point/boiling range	: not applicable
Density	: 0.94 g/cm ³ at 20 °C
Water solubility	: partly miscible

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: 79.49 %

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	: Vapours may form explosive mixture with air.
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10.4 Conditions to avoid

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Conditions to avoid : Keep away from open flames, hot surfaces and sources of ignition.

10.5 Incompatible materials

Materials to avoid : Strong acids and 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
Acetone : LD50: 5,800 mg/kg
Species: rat

1-ethoxypropan-2-ol : LD50: 4,900 mg/kg
Species: rat

Acute inhalation toxicity
Acetone : LC50: ca. 76 mg/l
Exposure time: 4 h
Species: rat

1-ethoxypropan-2-ol : LC50: > 14,200 mg/l
Exposure time: 4 h
Species: rat

Acute dermal toxicity
Acetone : LD50: 20,000 mg/kg
Species: rabbit

1-ethoxypropan-2-ol : LD50: 9,500 mg/kg
Species: rabbit

Skin corrosion/irritation

Skin irritation : May cause skin irritation in susceptible persons.

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Serious eye damage/eye irritation

Eye irritation : Causes serious eye irritation.

Respiratory or skin sensitisation

Sensitisation : no data available

Neurological effects : May cause drowsiness or dizziness.

Toxicology Assessment

Repeated dose toxicity : Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

12.1 Toxicity

Ecotoxicology studies for the product are not available.

Toxicity to fish

Acetone : LC50: 5,540 mg/l
Exposure time: 96 h
Species: Oncorhynchus mykiss (rainbow trout)

1-ethoxypropan-2-ol : LC50: > 1,000 mg/l

Toxicity to daphnia and other aquatic invertebrates

Acetone : EC50: 12,100 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)

1-ethoxypropan-2-ol : EC50: > 1,000 mg/l

Toxicity to algae

Acetone : EC50: 3,400 mg/l
Exposure time: 48 h

1-ethoxypropan-2-ol : IC50: > 1,000 mg/l

12.2 Persistence and degradability

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Biodegradability : no data available

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

Additional ecological information : slightly water endangering
Do not flush into surface water or sanitary sewer system.
Do not allow material to contaminate ground water system.

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 : 1950
UN proper shipping name : AEROSOLS Butane, Propane
Transport hazard class(es) : 2
Classification Code : 5F
Limited Quantity (LQ) Inner : 1.00 L
Packaging
Maximum quantity : 30.00 KG
Labels : 2.1

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Tunnel restriction code : (D)
Environmentally hazardous : no

IATA

UN number : 1950
Description of the goods : Aerosols, flammable Butane, Propane
Class : 2.1
Labels : 2.1

IATA_C

Packing instruction (cargo aircraft) : 203
Packing instruction (LQ) : Y203
Maximum quantity : 150.00 KG
Environmentally hazardous : no

IATA_P

Packing instruction (passenger aircraft) : 203
Packing instruction (LQ) : Y203
Maximum quantity : 75.00 KG
Environmentally hazardous : no

IMDG

UN number : 1950
Description of the goods : AEROSOLS Butane, Propane
Class : 2.1
Labels : 2.1
EmS Number 1 : F-D
EmS Number 2 : S-U
Marine pollutant : no

RID

UN number : 1950
Description of the goods : AEROSOLS Butane , Propane
Transport hazard class(es) : 2
Classification Code : 5F
Hazard Identification Number : 23
Labels : 2.1
Limited Quantity (LQ) Inner Packaging : 1.00 L
Maximum quantity : 30.00 KG
Environmentally hazardous : no

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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 1 slightly 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.
- : Classification / Labeling according to Directive 2008/47/EU.

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

- R10 Flammable.
R11 Highly flammable.
R12 Extremely flammable.
R36 Irritating to eyes.
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.

- EUH066 Repeated exposure may cause skin dryness or cracking.
H220 Extremely flammable gas.
H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

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Full text of Notas referred to under section 3

Nota C Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In Annex I, a general designation of the following type is sometimes used: "xylenol". In this case the manufacturer or any other person who markets such a substance must state on the label whether the substance is a specific isomer (a) or a mixture of isomers (b). Example: (a) 2,4-dimethylphenol (b) xyleneol (mixture of isomers).

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.