



## Safety data sheet

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Chemetall (now part of BASF Group) Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 11.03.2019

Version: 1.0

Product: **Ardrox 9PR5, Aerosol**

(ID no. 30706464/SDS\_GEN\_GB/EN)

Date of print 12.03.2019

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

#### 1.1. Product identifier

## **Ardrox 9PR5, Aerosol**

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

Recommended use: Detergents

Not recommended use: None known

#### 1.3. Details of the supplier of the safety data sheet

Company:  
Chemetall Ltd.  
Denbigh Road 65  
Bletchley Milton Keynes MK1 1PB  
Great Britain  
+44 1908 649333  
sds.global-chemetall@basf.com

#### 1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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### SECTION 2: Hazards Identification

#### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Skin Corr./Irrit. 2

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STOT SE 3 (Vapours may cause drowsiness and dizziness.)

Aquatic Chronic 2

Flam. Aerosol 1

H315, H411, H222, H336, H229

For the classifications not written out in full in this section the full text can be found in section 16.

## 2.2. Label elements

### Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:

Danger

Hazard Statement:

H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.
H222	Extremely flammable aerosol.
H336	May cause drowsiness or dizziness.
H229	Pressurized container: May burst if heated.

Precautionary Statements (Prevention):

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P243	Take action to prevent static discharges.
P251	Do not pierce or burn, even after use.
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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements (Response):

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.

Precautionary Statements (Storage):

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P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

According to Regulation (EC) No 1272/2008 [CLP]

Hazard determining component(s) for labelling: Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

### 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Chemical nature

Blend based on: organic solvent

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

cyclohexane

Content (W/W): >= 1 % - < 2 %

CAS Number: 110-82-7

EC-Number: 203-806-2

REACH registration number: 01-2119463273-41

INDEX-Number: 601-017-00-1

Asp. Tox. 1

Flam. Liq. 2

Skin Corr./Irrit. 2

STOT SE 3 (drowsiness and dizziness)

Aquatic Acute 1

Aquatic Chronic 1

M-factor acute: 1

M-factor chronic: 1

H225, H315, H304, H336, H400, H410

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

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Content (W/W): $\geq 50\%$ - $< 75\%$	Asp. Tox. 1
EC-Number: 927-510-4	Flam. Liq. 2
REACH registration number: 01-2119475515-33	Skin Corr./Irrit. 2
	STOT SE (Central nervous system) 3 (drowsiness and dizziness)
	Aquatic Chronic 2
	H315, H411, H225, H304, H336

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. Remove affected person from danger area. Immediately remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. If symptoms persist, seek medical advice.

On skin contact:

Wash affected areas thoroughly with soap and water. If symptoms persist, seek medical advice.

On contact with eyes:

Rinse immediately with plenty of water, also under the eyelids, for at least 30 minutes. Seek medical attention.

On ingestion:

Rinse mouth immediately with water. Do not induce vomiting. Seek medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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## SECTION 5: Fire-Fighting Measures

### 5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, dry powder, alcohol-resistant foam, water spray

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Unsuitable extinguishing media for safety reasons:  
water jet

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

carbon oxides

## **5.3. Advice for fire-fighters**

Special protective equipment:

Appropriate breathing apparatus may be required.

Further information:

In case of combustion evolution of toxic gases/vapours possible.

Cool endangered containers with water-spray. Risk of bursting.

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## **SECTION 6: Accidental Release Measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective clothing.

Information regarding personal protective measures see, section 8.

### **6.2. Environmental precautions**

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### **6.3. Methods and material for containment and cleaning up**

Ensure adequate ventilation. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in a suitable container for disposal according with the waste regulations (see section 13). Clean preferably with a detergent; avoid the use of solvents.

### **6.4. Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## **SECTION 7: Handling and Storage**

### **7.1. Precautions for safe handling**

Provide good ventilation of working area (local exhaust ventilation if necessary). In closed rooms provide exhaust ventilation at floor level. The workplace should be equipped with an emergency shower and eye-rinsing facility. Warn users about safety measures and precautions to prevent accidents.

Protection against fire and explosion:

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Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours may form explosive mixture with air. The relevant fire protection measures should be noted.

Electrical handling equipment should be explosion-proof. Use explosion-proof equipment.

## 7.2. Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Paper/Fibreboard, Carbon steel (Iron), tinned carbon steel (Tinplate)

Further information on storage conditions: Keep container dry. Keep container tightly closed in a cool, well-ventilated place. The entrance to storage rooms is to be granted only to appropriately trained personnel. Keep away from heat. Avoid direct sunlight. Protect from frost.

Storage stability:

Storage temperature: < 50.00 °C

Storage duration: 36 Months

## 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

74-98-6: propane

(WEL/EH 40 (UK))

Included in the regulation, but with no data values - See the regulation for further details

106-97-8: butane

TWA value 1,450 mg/m<sup>3</sup> ; 600 ppm (WEL/EH 40 (UK))

STEL value 1,810 mg/m<sup>3</sup> ; 750 ppm (WEL/EH 40 (UK))

110-82-7: cyclohexane

STEL value 1,050 mg/m<sup>3</sup> ; 300 ppm (WEL/EH 40 (UK))

TWA value 350 mg/m<sup>3</sup> ; 100 ppm (WEL/EH 40 (UK))

TWA value 700 mg/m<sup>3</sup> ; 200 ppm (OEL (EU))

indicative

#### Biological limit values (BLV)

No data available.

#### Components with PNEC

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110-82-7: cyclohexane

freshwater: 0.207 mg/l  
marine water: 0.207 mg/l  
intermittent release: 0.207 mg/l  
sediment (freshwater): 3.627 mg/kg  
sediment (marine water): 3.627 mg/kg  
soil: 2.99 mg/kg  
STP: 3.24 mg/l

#### Components with DNEL

110-82-7: cyclohexane

worker: Long-term exposure- systemic effects, Inhalation: 700 mg/m<sup>3</sup>, 200 ppm  
worker: Short-term exposure - systemic effects, Inhalation: 700 mg/m<sup>3</sup>, 200 ppm  
worker: Long-term exposure - local effects, Inhalation: 700 mg/m<sup>3</sup>, 200 ppm  
worker: Short-term exposure - local effects, Inhalation: 700 mg/m<sup>3</sup>, 200 ppm  
worker: Long-term exposure- systemic effects, dermal: 2016 mg/kg  
consumer: Short-term exposure - systemic effects, Inhalation: 412 mg/m<sup>3</sup>  
consumer: Long-term exposure - systemic and local effects, Inhalation: 206 mg/m<sup>3</sup>  
consumer: Short-term exposure - local effects, Inhalation: 412 mg/m<sup>3</sup>  
consumer: Long-term exposure - local effects, Inhalation: 206 mg/m<sup>3</sup>  
consumer: Long-term exposure- systemic effects, dermal: 1186 mg/kg  
consumer: Long-term exposure- systemic effects, oral: 59.4 mg/kg

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

worker: Long-term exposure- systemic effects, Inhalation: 2085 mg/m<sup>3</sup>  
worker: Long-term exposure- systemic effects, dermal: 300 mg/kg bw/day

## **8.2. Exposure controls**

### Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. (Gas filter EN 14387 AX)

Hand protection:

Chemical resistant protective gloves (EN 374)

Further information on penetration time is available from the manufacturer of the glove.

The protection glove should be tested for its specific suitability (e.g. mechanical strength, product compatibility, anti-static properties).

Eye protection:

Tightly fitting safety goggles (splash goggles) (e.g. EN 166)

Body protection:

Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

### General safety and hygiene measures

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Do not breathe vapour/spray. Take off immediately all contaminated clothing. Keep away from food, drink and animal feeding stuffs. Hands and/or face should be washed before breaks and at the end of the shift. Avoid contact with skin and eyes.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Form:	aerosol
Colour:	colourless
Odour:	solvent-like
pH value:	not applicable
solidification temperature:	not determined
boiling temperature:	98 °C
	active ingredient
	-40 °C
	propellant
Flash point:	-4 °C
	Information applies to the propellant.
	< -70 °C
	The values mentioned are those of the active ingredient.
Flammability:	not flammable
Vapour pressure:	(20 °C)
	not determined
	(50 °C)
	not determined
Density:	0.710 g/cm <sup>3</sup>
	(20 °C)
	The values mentioned are those of the active ingredient.
Solubility in water:	insoluble
Viscosity, kinematic:	(40 °C)
	not determined
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating

### 9.2. Other information

Self heating ability: It is not a substance capable of spontaneous heating.



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Miscibility with water: immiscible  
Flow time: not applicable

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## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3. Possibility of hazardous reactions

Vapours may form explosive mixture with air. Risk of bursting.

### 10.4. Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid direct sunlight. Avoid prolonged exposure to extreme heat.

### 10.5. Incompatible materials

Substances to avoid:  
strong oxidizing agents

### 10.6. Hazardous decomposition products

Possible decomposition products:  
No hazardous decomposition products if stored and handled as prescribed/indicated.

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:  
Based on available Data, the classification criteria are not met.

#### Irritation

Assessment of irritating effects:  
Skin contact causes irritation.

#### Respiratory/Skin sensitization

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Assessment of sensitization:

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

#### Germ cell mutagenicity

Assessment of mutagenicity:

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

#### Carcinogenicity

Assessment of carcinogenicity:

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

#### Reproductive toxicity

Assessment of reproduction toxicity:

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

#### Developmental toxicity

Assessment of teratogenicity:

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

#### Specific target organ toxicity (single exposure)

Assessment of STOT single:

Possible narcotic effects (drowsiness or dizziness).

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

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

#### Aspiration hazard

No aspiration hazard expected.

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## **SECTION 12: Ecological Information**

### **12.1. Toxicity**

Assessment of aquatic toxicity:

There are no test results available for this product. Do not allow to enter drains or waterways. The mixture has been assessed following regulation (EC) No 1272/2008 and is classified for ecotoxicological properties accordingly. See sections 2 and 3 for details.

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## **12.2. Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

Biological degradability of hazardous substances mentioned in section 3:

*Information on: cyclohexane*

*Elimination information:*

*77 % BOD of the ThOD (28 d) (OECD Guideline 301 F) (aerobic, activated sludge, domestic, non-adapted)*

## **12.3. Bioaccumulative potential**

Bioaccumulation potential:

No data available.

## **12.4. Mobility in soil**

Assessment transport between environmental compartments:

Adsorption in soil: No data available.

## **12.5. Results of PBT and vPvB assessment**

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

## **12.6. Other adverse effects**

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

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## **SECTION 13: Disposal Considerations**

### **13.1. Waste treatment methods**

Observe national and local legal requirements.

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## SECTION 14: Transport Information

### Land transport

ADR

UN number	UN1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2.1
Packing group:	Not applicable
Environmental hazards:	no
Special precautions for user:	Tunnel code: D

RID

UN number	UN1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2.1
Packing group:	Not applicable
Environmental hazards:	no
Special precautions for user:	

### Inland waterway transport

ADN

UN number	UN1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2.1
Packing group:	Not applicable
Environmental hazards:	no
Special precautions for user:	

### Transport in inland waterway vessel

Not evaluated

### Sea transport

IMDG

UN number:	UN 1950
UN proper shipping name:	AEROSOLS
Transport hazard class(es):	2.1
Packing group:	Not applicable

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Environmental hazards: no  
 Marine pollutant: YES  
 Special precautions for user:

### **Air transport**

IATA/ICAO

UN number: UN 1950  
 UN proper shipping name: AEROSOLS, FLAMMABLE  
 Transport hazard class(es): 2.1  
 Packing group: Not applicable  
 Environmental hazards: No Mark as dangerous for the environment is needed  
 Special precautions for user:

#### **14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

#### **14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

#### **14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

#### **14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

#### **14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

#### **14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

#### **14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Regulation: Not evaluated  
 Shipment approved: Not evaluated  
 Pollution name: Not evaluated  
 Pollution category: Not evaluated  
 Ship Type: Not evaluated

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## SECTION 15: Regulatory Information

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

#### Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 28, 29, 57, 3

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):  
FLAMMABLE AEROSOLS 'Flammable' aerosols Category 1 or 2, containing flammable gases  
Category 1 or 2 or flammable liquids Category 1

### 15.2. Chemical Safety Assessment

For a mixture it is not mandatory to include an exposure scenario in the material safety data sheet.

The general risk management measures related to the physico-chemical hazard of the product are communicated in chapter 2-14 of this SDS; they are to be considered by the (downstream) user when assessing the risks in accordance with his specific operating conditions and workplace environment.

## SECTION 16: Other Information

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Skin Corr./Irrit.	Skin corrosion/irritation
STOT SE	Specific target organ toxicity — single exposure
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Flam. Aerosol	Flammable aerosols
Asp. Tox.	Aspiration hazard
Flam. Liq.	Flammable liquids
Aquatic Acute	Hazardous to the aquatic environment - acute
H315	Causes skin irritation.
H411	Toxic to aquatic life with long lasting effects.
H222	Extremely flammable aerosol.
H336	May cause drowsiness or dizziness.
H229	Pressurized container: May burst if heated.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification

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agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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Vertical lines in the left hand margin indicate an amendment from the previous version.