

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product identifier

Trade name : ARDROX 8901W Aerosol

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

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

Company : CHEMETALL AUSTRALASIA PTY LTD  
17 TURBO DRIVE  
3153 BAYSWATER VIC  
Contact person : Customer Service  
Telephone : +61 3 9729 6253 BUSINESS HOURS  
Telefax : +61 3 9720 1711  
Contact person product safety : Technical Manager  
Telephone : +61 3 9729 6253  
E-mail address : customer.service.au@basf.com

### 1.4 Emergency telephone number

Emergency telephone number : +61 3 9720 0370 AFTER HOURS

## SECTION 2. HAZARDS IDENTIFICATION

### GHS Classification

Flammable aerosols : Category 1  
Serious eye damage/eye irritation : Category 2A  
Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

### GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.  
H229 Pressurised container: May burst if heated.  
H319 Causes serious eye irritation.  
H336 May cause drowsiness or dizziness.  
AUH066 Repeated exposure may cause skin dryness or cracking

Precautionary statements : **Prevention:**  
P210 Keep away from heat/sparks/open flames/hot surfaces.

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

No smoking.  
P211 Do not spray on an open flame or other ignition source.  
P243 Take precautionary measures against static discharge.  
P251 Do not pierce or burn, even after use.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ 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:**

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.

**Storage:**

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

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards which do not result in classification**

The information required is contained in this Safety Data Sheet.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

**Hazardous components**

Chemical name	CAS-No.	Concentration (% w/w)
Acetone	67-64-1	>= 30 - < 60
Butane	106-97-8	>= 10 - < 30
titanium dioxide	13463-67-7	>= 10 - < 30
2-(2-Butoxyethoxy)ethanol; diethylene glycol monobutyl ether	112-34-5	< 10

**SECTION 4. FIRST AID MEASURES**

General advice : First Aid responders should pay attention to self-protection and use the recommended protective clothing  
Move out of dangerous area.  
Take off contaminated clothing and shoes immediately.

Inhalation : Move to fresh air.  
If symptoms persist, call a physician.

Skin contact : Wash off with soap and plenty of water.  
If symptoms persist, call a physician.

Eye contact : Rinse immediately with plenty of water, also under the eyelids.  
Consult a physician.

Ingestion : Rinse mouth with water.

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

Do NOT induce vomiting.  
Consult a physician.

Most important symptoms and effects, both acute and delayed : No information available.

Notes to physician : Treat symptomatically.  
For specialist advice physicians should contact the Poisons Information Service.

---

## SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
Dry powder  
Alcohol-resistant foam  
Water spray

Unsuitable extinguishing media : High volume water jet

Specific hazards during fire-fighting : Heating or fire can release toxic gas.  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)

Specific extinguishing methods : Use water spray to cool unopened containers.  
Risk of bursting.

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

---

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Wear personal protective equipment.  
For further information see Section 8 of the safety data sheet.  
For disposal considerations see section 13.

Environmental precautions : Do not flush into surface water or sanitary sewer system.  
Avoid subsoil penetration.

Methods and materials for containment and 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).

---

## SECTION 7. HANDLING AND STORAGE

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.

Advice on safe handling : Provide sufficient air exchange and/or exhaust in work rooms.

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

Provide exhaust ventilation close to floor level.  
Have eye wash bottle or eye rinse ready at the work place.  
To avoid risks to man and the environment, comply with the instructions for use.

- 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 vapours, aerosols.
- Conditions for safe storage : Keep containers tightly closed in a dry, cool and well-ventilated place.  
Store in a place accessible by authorized persons only.  
To maintain product quality, do not store in heat or direct sunlight.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Acetone	67-64-1	TWA	500 ppm 1,185 mg/m <sup>3</sup>	AU OEL
		STEL	1,000 ppm 2,375 mg/m <sup>3</sup>	AU OEL
		TWA	250 ppm	ACGIH
		STEL	500 ppm	ACGIH
Butane	106-97-8	TWA	800 ppm 1,900 mg/m <sup>3</sup>	AU OEL
		STEL	1,000 ppm	ACGIH
titanium dioxide	13463-67-7	TWA	10 mg/m <sup>3</sup>	AU OEL
	Further information: This value is for inhalable dust containing no asbestos and < 1% crystalline silica			
		TWA	10 mg/m <sup>3</sup> (Titanium dioxide)	ACGIH
2-(2-Butoxyethoxy)ethanol; diethylene glycol monobutyl ether	112-34-5	TWA (Inhalable fraction and vapor)	10 ppm	ACGIH

### Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Acetone	67-64-1	Acetone	Urine	End of shift (As soon as possible after exposure ceases)	25 mg/l	ACGIH BEI

- Engineering measures : Ensure adequate ventilation, especially in confined areas.

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

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 according to AS/NZS 1715/1716 Recommended Filter type: Type B
Hand protection Material	: Gloves: PVC, Nitrile, Neoprene or natural rubber according to AS/NZS 2161.1
Remarks	: Protective gloves complying with AS/NZS 2161.1. The exact break through time can be obtained from the protective glove producer and this has to be observed. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
Eye protection	: Tightly fitting safety goggles or safety glasses with side shields. Eye protection (AS 1336/1337)
Skin and body protection	: Chemical resistant protective clothing according to AS3765/2210
Protective measures	: Handle in accordance with good industrial hygiene and safety practice. Ensure that eye flushing systems and safety showers are located close to the working place.

#### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: opaque liquid
Colour	: white
Odour	: sweet
Boiling point/boiling range	: -25 °C
Flash point	: -50 °C Method: closed cup
Upper explosion limit	: Upper flammability limit ca. 9.5 %(V)
Lower explosion limit	: lower flammability limit ca. 1.8 %(V)
Density	: ca. 0.9 g/cm <sup>3</sup>
Solubility(ies) Water solubility	: partly soluble

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

---

## SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Vapours may form explosive mixture with air. Pressurised container: May burst if heated.
Conditions to avoid	: Keep away from open flames, hot surfaces and sources of ignition. Strong sunlight for prolonged periods.
Hazardous decomposition products	: No decomposition if stored and applied as directed.

---

## SECTION 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Product : No data available

### Components:

#### Acetone:

Acute oral toxicity : LD50 (Rat): 5,800 mg/kg  
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50 (Rat): ca. 76 mg/l  
Exposure time: 4 h

Acute dermal toxicity : LD50 (Rabbit): > 158,000 mg/kg

#### titanium dioxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg  
Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 6.8 mg/l  
Exposure time: 4 h

#### 2-(2-Butoxyethoxy)ethanol; diethylene glycol monobutyl ether:

Acute oral toxicity : LD50 (Rat): 3,384 mg/kg

Acute dermal toxicity : LD50 (Rabbit): 2,700 mg/kg

### Skin corrosion/irritation

Product : No data available

### Serious eye damage/eye irritation

Product : No data available

### Respiratory or skin sensitisation

#### Product:

Remarks: No data available

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

### Chronic toxicity

#### Germ cell mutagenicity

Product : No data available

#### Components:

##### Acetone:

Genotoxicity in vitro : Test Type: Ames test  
Method: OECD Test Guideline 471  
Result: negative

: Test Type: Ames test  
Method: OECD Test Guideline 476  
Result: negative

Genotoxicity in vivo : Test Type: in vivo assay  
Species: Mouse  
Application Route: Oral  
Result: negative

#### Carcinogenicity

Product : No data available

#### Reproductive toxicity

Product : No data available

#### STOT - single exposure

Product : No data available

#### STOT - repeated exposure

Product : No data available

#### Repeated dose toxicity

##### Components:

##### titanium dioxide:

Species: Rat  
NOAEL: 3500  
Application Route: Oral  
Exposure time: 90 d

#### Aspiration toxicity

Product : No data available

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### Components:

##### **Acetone:**

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 5,540 mg/l  
Exposure time: 96 h  
Test Type: static test
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 8,800 mg/l  
Exposure time: 48 h  
Test Type: static test
- NOEC (Daphnia magna (Water flea)): 2,212 mg/l  
Exposure time: 28 d  
Test Type: flow-through test
- Toxicity to algae : NOEC (Algae): 430 mg/l  
Exposure time: 96 h  
Test Type: static test
- NOEC (Microcystis aeruginosa (blue-green algae)): 530 mg/l  
Exposure time: 8 d  
Test Type: static test
- Toxicity to bacteria : (activated sludge): Exposure time: 30 min  
Test Type: Respiration inhibition
- titanium dioxide:**
- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l  
Exposure time: 96 h  
Test Type: static test  
Method: OECD Test Guideline 203
- LC50 (Pimephales promelas (Fathead minnow)): > 1,000 mg/l  
Exposure time: 96 h  
Test Type: static test
- LC50 (Cyprinodon variegatus (sheepshead minnow)): > 10,000 mg/l  
Exposure time: 96 h  
Test Type: semi-static test  
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Test Type: static test  
Method: OECD Test Guideline 202
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 16 mg/l  
Exposure time: 72 h  
Test Type: static test
- EC50 (Skeletonema costatum (marine diatom)): > 10,000 mg/l  
Exposure time: 72 h



Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

Method: ISO 10253

**2-(2-Butoxyethoxy)ethanol; diethylene glycol monobutyl ether:**

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 2,750 mg/l

Exposure time: 48 h

Method: DIN 38412

LC50 (Lepomis macrochirus (Bluegill sunfish)): 1,300 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 2,850 mg/l  
aquatic invertebrates  
Exposure time: 48 h

Toxicity to algae : NOEC (Desmodesmus subspicatus (green algae)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 201

**Persistence and degradability**

**Product:**

Biodegradability : Remarks: No data available

**Bioaccumulative potential**

**Product:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

**Mobility in soil**

**Product:**

Distribution among environ- : Remarks: No data available  
mental compartments

**Components:**

**titanium dioxide:**

Distribution among environ- : Medium: Soil  
mental compartments  
Remarks: immobile

**Other adverse effects**

No data available

---

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

Waste from residues : In accordance with local and national regulations.

Packaging : Dispose of as unused product.

---

**SECTION 14. TRANSPORT INFORMATION**

**International Regulation**

**IATA-DGR**

Version: 1.1

Revision Date 13.01.2017

Print Date 13.01.2017

UN/ID No. : UN 1950  
Proper shipping name : Aerosols, flammable  
(Butane)  
Class : 2.1  
Packing group : Not assigned by regulation  
Labels : Flammable gas  
Packing instruction (cargo aircraft) : 203  
Packing instruction (passenger aircraft) : 203

**IMDG-Code**

UN number : UN 1950  
Proper shipping name : AEROSOLS  
(Butane)  
Class : 2.1  
Packing group : Not assigned by regulation  
Labels : 2.1  
EmS Code : F-D, S-U  
Marine pollutant : no  
Remarks : Shaded from sources of heat., "IMDG-Code segregation group not applicable"., Protected from sources of heat., For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters., For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**National Regulations**

**SECTION 15. REGULATORY INFORMATION**

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

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 and labelling according to Directive 75/324/EEC.

Standard for the Uniform : No poison schedule number allocated  
Scheduling of Medicines and  
Poisons

## SECTION 16. OTHER INFORMATION

### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

### Further information

Other 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.

Date format : dd.mm.yyyy

AU / EN