

Warning



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

1.1. Product identifier

Trade name : Arcal Prime
Product code : 1050003/1050007/1050013
Other means of identification : Arcal Prime
CAS-No. : 7440-37-1
EC-No. : 231-147-0
EC Index-No. : ---

REACH registration No : Listed in Annex IV / V REACH, exempted from registration.

Chemical formula : Ar

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

Relevant identified uses : No additional information available

1.3. Details of the supplier of the safety data sheet

AIR LIQUIDE (PTY) LTD
03 Crn Vereeniging Road & Andre Marais Street Alrode, Alberton
1451 Gauteng
SOUTH AFRICA
T +27 87 288 1100
reshoketsoe.makuse@airliquide.com - www.airliquide.co.za

1.4. Emergency telephone number

Emergency telephone number : +27 87 288 1100

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Physical hazards Gases under pressure : Compressed gas H280

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS04

Signal word (CLP) : Warning
Hazard statements (CLP) : H280 - Contains gas under pressure; may explode if heated.
Precautionary statements (CLP)
- Storage : P410+P403 - Protect from sunlight. Store in a well-ventilated place.

2.3. Other hazards

Asphyxiant in high concentrations.

SECTION 3: Composition/information on ingredients**3.1. Substances**

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Argon	CAS-No.: 7440-37-1 EC-No.: 231-147-0 EC Index-No.: --- REACH registration No: *1	≤ 99.999	Press. Gas (Comp.), H280

Contains no other components or impurities which will influence the classification of the product.

*1: Listed in Annex IV / V REACH, exempted from registration.

*3: Registration not required: Substance manufactured or imported < 1t/y.

3.2. Mixtures

Not applicable

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

- Inhalation : Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Perform cardiopulmonary resuscitation if breathing stopped.

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

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation.

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

No additional information available

SECTION 5: Firefighting measures**5.1. Extinguishing media**

No additional information available

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products : None.

5.3. Advice for firefighters

Special protective equipment for fire fighters : In confined space use self-contained breathing apparatus.
Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire fighters.
Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves for firefighters. EN 15090 Footwear for firefighters. EN 443 Helmets for fire fighting in buildings and other structures.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel : Act in accordance with local emergency plan.
Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.
Stay upwind.
See section 8 of the SDS for more information on personal protective equipment
Try to stop release.
Evacuate area.
- For emergency responders : See section 5.3 of the SDS for more information.
Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
Oxygen detectors should be used when asphyxiating gases may be released.

6.2. Environmental precautions

Try to stop release.

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Carbon dioxide (124-38-9)

EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Carbon dioxide
IOEL TWA	9000 mg/m ³
IOEL TWA [ppm]	5000 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC

OEL (Occupational Exposure Limits) : None available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation.
Oxygen detectors should be used when asphyxiating gases may be released.

8.2.2. Individual protection measures, e.g. personal protective equipment

	No additional information available
• Skin protection	
- Hand protection	: No additional information available
- Other	: No additional information available
• Respiratory protection	: No additional information available
• Thermal hazards	: No additional information available

8.2.3. Environmental exposure controls

None necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	
- Physical state at 20°C / 101.3kPa	: Gas
- Colour	: Colourless.
Odour	: Odourless. Odour threshold is subjective and inadequate to warn of overexposure.
pH	: Not applicable for gases and gas mixtures.
Melting point / Freezing point	: Not applicable for gas mixtures.
Boiling point	: Not applicable for gas mixtures.
Flash point	: Not applicable for gases and gas mixtures.
Flammability	: Not available
Lower explosion limit	: Not applicable.
Upper explosion limit	: Not applicable.
Vapour pressure [20°C]	: Not applicable.
Vapour pressure [50°C]	: Not applicable.
Density	: Not applicable for gases and gas mixtures.
Vapour density	: Not applicable.
Relative density, liquid (water=1)	: Not applicable.
Relative density, gas (air=1)	: Heavier than air.
Water solubility	: 67.3 mg/l
Partition coefficient n-octanol/water (Log Kow)	: Not applicable for gas mixtures.
Auto-ignition temperature	: Non flammable.
Decomposition temperature	: Not applicable.
Viscosity, kinematic	: No reliable data available.
Particle characteristics	: Not applicable for gases and gas mixtures. Nanoforms are not relevant for gases and gas mixtures

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Critical temperature [°C]	: -122 °C
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9.2.2. Other safety characteristics

Molar mass	: Not applicable for gas mixtures.
Evaporation rate	: Not applicable for gases and gas mixtures.

SECTION 10: Stability and reactivity

10.1. Reactivity

No reactivity hazard other than the effects described in sub-sections below.

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

Reactivity : None.
: This mixture contains components with the following reactivity : Violently oxidises organic material. Can form explosive mixture with air. May react violently with oxidants.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

With water causes rapid corrosion of some metals.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity : No additional information available
Skin corrosion/irritation : No additional information available
Serious eye damage/irritation : No additional information available
Respiratory or skin sensitisation : No additional information available
Germ cell mutagenicity : No additional information available
Carcinogenicity : No additional information available
Toxic for reproduction : Fertility : No additional information available
Toxic for reproduction : unborn child : No additional information available
STOT-single exposure : No additional information available
STOT-repeated exposure : No additional information available
Aspiration hazard : No additional information available

11.2. Information on other hazards

Other information : The substance/mixture has no endocrine disrupting properties.

SECTION 12: Ecological information**12.1. Toxicity**

EC50 48h - Daphnia magna [mg/l] : No data available.
EC50 72h - Algae [mg/l] : No data available.
LC50 96 h - Fish [mg/l] : No data available.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

The substance/mixture has no endocrine disrupting properties.

12.7. Other adverse effects

Effect on the ozone layer : No additional information available
Effect on global warming : None.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

May be vented to atmosphere in a well ventilated place.
Do not discharge into any place where its accumulation could be dangerous.
List of hazardous waste codes (from Commission Decision 2000/532/EC as amended) : No additional information available

13.2. Additional information

No additional information available

SECTION 14: Transport information

14.1. UN number or ID number

In accordance with ADR / RID / IMDG / IATA / ADN
UN-No. : 1006

14.2. UN proper shipping name

Transport by road/rail/inland waterways (ADR/RID/ADN) : ARGON, COMPRESSED
Transport by air (ICAO-TI / IATA-DGR) : Argon, compressed
Transport by sea (IMDG) : ARGON, COMPRESSED

14.3. Transport hazard class(es)

Labelling



2.2 : Non-flammable, non-toxic gases.

Transport by road/rail/inland waterways (ADR/RID/ADN)

Class : 2
Classification code : 1A
Hazard identification number : 20
Tunnel Restriction : E - Passage forbidden through tunnels of category E

Transport by air (ICAO-TI / IATA-DGR)

Class / Div. (Sub. risk(s)) : 2.2

Transport by sea (IMDG)

Class / Div. (Sub. risk(s)) : 2.2
Emergency Schedule (EmS) - Fire : F-C
Emergency Schedule (EmS) - Spillage : S-V

14.4. Packing group

Transport by road/rail/inland waterways (ADR/RID/ADN) : Not applicable
Transport by air (ICAO-TI / IATA-DGR) : Not applicable
Transport by sea (IMDG) : Not applicable

14.5. Environmental hazards

Transport by road/rail/inland waterways (ADR/RID/ADN) : None.

Transport by air (ICAO-TI / IATA-DGR) : None.
Transport by sea (IMDG) : None.

14.6. Special precautions for user**Packing Instruction(s)**

Transport by road/rail/inland waterways (ADR/RID/ADN) : P200
Transport by air (ICAO-TI / IATA-DGR)
Passenger and Cargo Aircraft : 200.
Cargo Aircraft only : 200.
Transport by sea (IMDG) : P200

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU-Regulations**

Restrictions on use :

National regulations

Regulatory reference : Ensure all national/local regulations are observed.

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Training advice : The hazard of asphyxiation is often overlooked and must be stressed during operator training.
For more guidance, refer to EIGA SL 01 "Dangers of Asphyxiation", downloadable at <http://www.eiga.eu>.

Full text of H- and EUH-statements

H280	Contains gas under pressure; may explode if heated.
Press. Gas (Comp.)	Gases under pressure : Compressed gas

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