

Page : 1/15 Revised edition no: 3.0

Revision date: 2023-01-23 Supersedes version of: 2020-07-01

NOAL 1011

Country: NO / Language: EN

Arcal 129

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

1.1. Product identifier

Trade name : Arcal 129 SDS no : NOAL_1011

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

Relevant identified uses : Industrial and professional uses. Perform risk assessment prior to use.

Industrial and professional use for chemical analysis, calibration, (routine) quality control,

laboratory use, under controlled conditions. Contact supplier for more information on uses.

Uses advised against Consumer use.

Uses other than those listed above are not supported, contact your supplier for more

information on other uses.

1.3. Details of the supplier of the safety data sheet

Company identification

Supplier

AIR LIQUIDE NORWAY AS Drammensveien 64 B 3050 Mjøndalen - NORWAY T + 47 32 27 41 40

info.norway@airliquide.com

E-Mail address (competent person) : eunordic-sds@airliquide.com

1.4. Emergency telephone number

Emergency telephone number : 112 / Giftinformasjon: + 47 22 59 13 00

> Availability (24 / 7)

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)

Hazard statements (CLP) H280 - Contains gas under pressure; may explode if heated.

Precautionary statements (CLP)

: P403 - Store in a well-ventilated place. - Storage



Page : 2/15
Revised edition no : 3.0
Revision date : 2023-01-23

Supersedes version of : 2020-07-01

NOAL_1011
Country: NO / Language: EN

Arcal 129

2.3. Other hazards

Asphyxiant in high concentrations. Not classified as PBT or vPvB.

The substance/mixture has no endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not established.

3.2. Mixtures

Name	Product identifier	Composition [V-%]:	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Argon	CAS-No.: 7440-37-1 EC-No.: 231-147-0 EC Index-No.: REACH-no: *1	91.5	Press. Gas (Comp.), H280
Helium	CAS-No.: 7440-59-7 EC-No.: 231-168-5 EC Index-No.: REACH-no: *1	5	Press. Gas (Comp.), H280
Carbon dioxide	CAS-No.: 124-38-9 EC-No.: 204-696-9 EC Index-No.: REACH-no: *1	1.8	Press. Gas (Liq.), H280
Nitrogen	CAS-No.: 7727-37-9 EC-No.: 231-783-9 EC Index-No.: REACH-no: *1	1.7	Press. Gas (Comp.), H280

Full text of H- and EUH-statements: see section 16

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

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.

Skin contact
 Eye contact
 Adverse effects not expected from this product.
 Adverse effects not expected from this product.

- Ingestion : Ingestion is not considered a potential route of exposure.

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.

See section 11

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

None.

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

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



Page : 3/15
Revised edition no : 3.0
Revision date : 2023-01-23

Revision date: 2023-01-23
Supersedes version of: 2020-07-01

Country: NO / Language: EN

3/15

Arcal 129 NOAL_1011

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray or fog.

Product does not burn, use fire control measures appropriate for the surrounding fire.

- Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Special hazards arising from the substance or mixture

Specific hazards : Exposure to fire may cause containers to rupture/explode.

Hazardous combustion products : None.

5.3. Advice for firefighters

Specific methods : Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat

radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering

sewers and drainage systems. If possible, stop flow of product.

Use water spray or fog to knock down fire fumes if possible.

Move containers away from the fire area if this can be done without risk.

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 137 - Self-contained open-circuit compressed air breathing apparatus with full

face mask.

Standard EN 469 - Protective clothing for firefighters. Standard - EN 659: Protective gloves

for firefighters.

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.

Try to stop release. Evacuate area.

Ensure adequate air ventilation.

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

For emergency responders : 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.

See section 5.3 of the SDS for more information.

6.2. Environmental precautions

Try to stop release.

6.3. Methods and material for containment and cleaning up

Ventilate area.

6.4. Reference to other sections

See also sections 8 and 13.



Page : 4/15

Revised edition no : 3.0

Revision date : 2023-01-23

Country: NO / Language: EN

Supersedes version of : 2020-07-01

NOAL_1011

Arcal 129

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safe handling of the gas receptacle

Safe use of the product

: Do not breathe gas.

Avoid release of product into atmosphere.

The product must be handled in accordance with good industrial hygiene and safety procedures

Only experienced and properly instructed persons should handle gases under pressure.

Consider pressure relief device(s) in gas installations.

Ensure the complete gas system was (or is regularily) checked for leaks before use.

Do not smoke while handling product.

Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Contact your gas supplier if in doubt.

Avoid suck back of water, acid and alkalis.

: Refer to supplier's container handling instructions.

Do not allow backfeed into the container.

Protect containers from physical damage; do not drag, roll, slide or drop.

When moving cylinders, even for short distances, use a cart (trolley, hand truck, etc.)

designed to transport cylinders.

Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use.

If user experiences any difficulty operating valve discontinue use and contact supplier.

Never attempt to repair or modify container valves or safety relief devices.

Damaged valves should be reported immediately to the supplier.

Keep container valve outlets clean and free from contaminants particularly oil and water. Replace valve outlet caps or plugs and container caps where supplied as soon as container

is disconnected from equipment.

Close container valve after each use and when empty, even if still connected to equipment.

Never attempt to transfer gases from one cylinder/container to another.

Never use direct flame or electrical heating devices to raise the pressure of a container.

Do not remove or deface labels provided by the supplier for the identification of the content

of the container.

Suck back of water into the container must be prevented.

Open valve slowly to avoid pressure shock.

7.2. Conditions for safe storage, including any incompatibilities

Observe all regulations and local requirements regarding storage of containers.

Containers should not be stored in conditions likely to encourage corrosion.

Container valve guards or caps should be in place.

Containers should be stored in the vertical position and properly secured to prevent them

from falling over.

Stored containers should be periodically checked for general condition and leakage.

Keep container below 50°C in a well ventilated place.

Store containers in location free from fire risk and away from sources of heat and ignition.

Keep away from combustible materials.

7.3. Specific end use(s)

None.

NO - en

4/15



Page: 5/15

Revised edition no : 3.0
Revision date : 2023-01-23
Supersedes version of : 2020-07-01

Arcal 129 NOAL_1011

Country : NO / Language : EN

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/m³	
IOEL TWA [ppm]	5000 ppm	
Austria - Occupational Exposure Limits		
Local name	Kohlenstoffdioxid	
MAK (mg/m³)	9000 mg/m³	
MAK (OEL TWA) [ppm]	5000 ppm	
MAK (OEL STEL)	18000 mg/m³	
MAK (OEL STEL) [ppm]	10000 ppm	
Belgium - Occupational Exposure Limits		
Local name	Carbone (dioxyde de) # Koolstofdioxide	
OEL TWA	9131 mg/m³	
OEL TWA [ppm]	5000 ppm	
OEL STEL	54784 mg/m³	
OEL STEL [ppm]	30000 ppm	
Remark	A: La mention A signifie que l'agent libère un gaz ou une vapeur qui n'ont en eux-mêmes aucun effet physiologique mais peuvent diminuerm.Le taux d'oxygène dans l'air. Lorsque le taux d'oxygène descend en dessous de 17-18 % (vol/vol) le manque d'oxygène provoque des suffocations qu'aucun symptôme préalable n'annonce. # De vermelding A betekent dat dit agens gas of damp vrijgeeft dat of die op zich geen fysiologische werking heeft, maar het zuurstofgehalte in de lucht verlaagt. Wanneer het zuurstofgehalte daalt onder de 17-18 % (vol/vol), veroorzaakt het zuurstoftekort verstikking, die zich manifesteert zonder dat er een waarschuwing aan voorafgaat.	
Bulgaria - Occupational Exposure Limits		
Local name	Въглероден диоксид	
OEL TWA	9000 mg/m³	
OEL TWA [ppm]	5000 ppm	
Remark	• (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)	
Croatia - Occupational Exposure Limits		
Local name	Ugljikov dioksid	
GVI (OEL TWA) [1]	9000 mg/m³	
GVI (OEL TWA) [2]	5000 ppm	
Remark	EU**	



Page : 6/15

Revised edition no : 3.0
Revision date : 2023-01-23
Supersedes version of : 2020-07-01

Arcal 129 NOAL_1011

Country: NO / Language: EN

	County : NO / Language : EN
Czech Republic - Occupational Exposure Limits	
Local name	Oxid uhli itý
PEL (OEL TWA)	9000 mg/m³
PEL (OEL TWA) [ppm]	5000 ppm
NPK-P (OEL C)	45000 mg/m³
NPK-P (OEL C) [ppm]	25020 ppm
Denmark - Occupational Exposure Limits	
Local name	Carbondioxid (Kuldioxid; Kulsyre)
OEL TWA [1]	9000 mg/m³
OEL TWA [2]	5000 ppm
Estonia - Occupational Exposure Limits	
Local name	Süsinikdioksiid
OEL TWA	9000 mg/m³
OEL TWA [ppm]	5000 ppm
Finland - Occupational Exposure Limits	
Local name	Hiilidioksidi
HTP (OEL TWA) [1]	9100 mg/m³
HTP (OEL TWA) [2]	5000 ppm
France - Occupational Exposure Limits	
Local name	Dioxyde de carbone
VME (OEL TWA)	9000 mg/m³
VME (OEL TWA) [ppm]	5000 ppm
Remark	Valeurs règlementaires indicatives
Germany - Occupational Exposure Limits (TRGS 900)	
Local name	Kohlenstoffdioxid
AGW (OEL TWA) [1]	9100 mg/m³
AGW (OEL TWA) [2]	5000 ppm
Remark	DFG,EU
Greece - Occupational Exposure Limits	
OEL TWA	9000 mg/m³
OEL TWA [ppm]	5000 ppm
OEL STEL	54000 mg/m³
Hungary - Occupational Exposure Limits	
Local name	SZÉN-DIOXID
AK (OEL TWA)	9000 mg/m³



Page : 7/15

Revised edition no : 3.0
Revision date : 2023-01-23
Supersedes version of : 2020-07-01

Arcal 129 NOAL_1011

Country: NO / Language: EN

	Country: NO / Language: EN
Ireland - Occupational Exposure Limits	
Local name	Carbon dioxide
OEL TWA [1]	9000 mg/m³
OEL TWA [2]	5000 ppm
OEL STEL	27000 mg/m³
OEL STEL [ppm]	15000 ppm
Italy - Occupational Exposure Limits	
Local name	Anidride carbonica
OEL TWA	9000 mg/m³
OEL TWA [ppm]	5000 ppm
Latvia - Occupational Exposure Limits	
Local name	Oglekļadioksīds
OEL TWA	9000 mg/m³
OEL TWA [ppm]	5000 ppm
Lithuania - Occupational Exposure Limits	
Local name	Anglies dioksidas
IPRV (OEL TWA)	9000 mg/m³
IPRV (OEL TWA) [ppm]	5000 ppm
Luxembourg - Occupational Exposure Limits	
Local name	Dioxyde de carbone
OEL TWA	9000 mg/m³
OEL TWA [ppm]	5000 ppm
Malta - Occupational Exposure Limits	
Local name	Carbondioxide
OEL TWA	9000 mg/m³
OEL TWA [ppm]	5000 ppm
Netherlands - Occupational Exposure Limits	
Local name	Kooldioxide
TGG-8u (OEL TWA)	9000 mg/m³
Poland - Occupational Exposure Limits	
Local name	Ditlenek węgla 7
NDS (OEL TWA)	9000 mg/m³
NDSCh (OEL STEL)	27000 mg/m³
Portugal - Occupational Exposure Limits	·
Local name	Dióxido de carbono



Page : 8/15

Revised edition no : 3.0
Revision date : 2023-01-23
Supersedes version of : 2020-07-01

Arcal 129

NOAL_1011

Arcai 129		NOAL_IVII
		Country : NO / Language : EN
OEL TWA [ppm]	5000 ppm	
OEL STEL [ppm] 30000 ppm		
Romania - Occupational Exposure Limits		
Local name	Bioxid de carbon	
OEL TWA	9000 mg/m³	
OEL TWA [ppm]	5000 ppm	
Slovenia - Occupational Exposure Limits		
Local name	ogljikov dioksid	
OEL TWA	9000 mg/m³	
OEL TWA [ppm]	5000 ppm	
Spain - Occupational Exposure Limits		
Local name	Dióxido de carbono	
VLA-ED (OEL TWA) [1]	9150 mg/m³	
VLA-ED (OEL TWA) [2]	5000 ppm	
Remark	indicativo. Todos estos agentes qu directivas de valores límite indicati Bibliografía). Los estados miembro directivas para su transposición a l	a U.E. estableció en su día un valor límite uímicos figuran al menos en una de las vos publicadas hasta ahora (ver Anexo C. os disponen de un tiempo fijado en dichas los valores límites de cada país miembro. tienen la misma validez que el resto de
Sweden - Occupational Exposure Limits		
Local name	Koldioxid	
NGV (OEL TWA)	9000 mg/m³	
NGV (OEL TWA) [ppm]	5000 ppm	
KTV (OEL STEL)	18000 mg/m³	
KTV (OEL STEL) [ppm]	10000 ppm	
United Kingdom - Occupational Exposure Limits	S	
Local name	Carbon dioxide	
WEL TWA (OEL TWA) [1]	9150 mg/m³	
WEL TWA (OEL TWA) [2]	5000 ppm	
WEL STEL (OEL STEL)	27400 mg/m³	
WEL STEL (OEL STEL) [ppm]	15000 ppm	
Iceland - Occupational Exposure Limits		
Local name	Koldíoxíð (koltvísýringur, kolsýra)	
OEL TWA	9000 mg/m³	
OEL TWA [ppm]	5000 ppm	



Page : 9/15

Revised edition no : 3.0
Revision date : 2023-01-23
Supersedes version of : 2020-07-01

Country: NO / Language: EN

Arcal 129 NOAL_1011

	7 7 3 3	
Norway - Occupational Exposure Limits		
Local name	Karbondioksid	
Grenseverdi (OEL TWA) [1]	9000 mg/m³	
Grenseverdi (OEL TWA) [2]	5000 ppm	
Switzerland - Occupational Exposure Limits		
Local name	Kohlendioxid	
MAK (OEL TWA) [1]	9000 mg/m³	
MAK (OEL TWA) [2]	5000 ppm	
Remark	Asphyxie - NIOSH	
USA - ACGIH - Occupational Exposure Limits		
Local name	Carbon dioxide	
ACGIH OEL TWA [ppm]	5000 ppm	
ACGIH OEL STEL [ppm]	30000 ppm	
Remark (ACGIH)	Asphyxia	

DNEL (Derived-No Effect Level) : None available.

PNEC (Predicted No-Effect Concentration) : None available.

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Systems under pressure should be regularily checked for leakages.

Ensure exposure is below occupational exposure limits (where available).

Oxygen detectors should be used when asphyxiating gases may be released.

Consider the use of a work permit system e.g. for maintenance activities.

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

A risk assessment should be conducted and documented in each work area to assess the risks related to the use of the product and to select the PPE that matches the relevant risk.

The following recommendations should be considered:

PPE compliant to the recommended EN/ISO standards should be selected.

• Eye/face protection : Wear safety glasses with side shields.

Standard EN 166 - Personal eye-protection - specifications.

Skin protection

- Hand protection : Wear working gloves when handling gas containers.

Standard EN 388 - Protective gloves against mechanical risk, performance level 1 or higher.

- Other : Wear safety shoes while handling containers.

Standard EN ISO 20345 - Personal protective equipment - Safety footwear.



Page : 10/15
Revised edition no : 3.0
Revision date : 2023-01-23

Supersedes version of : 2020-07-01

Arcal 129

NOAL_1011

Country: NO / Language: EN

10/15

· Respiratory protection

Gas filters may be used if all surrounding conditions e.g. type and concentration of the contaminant(s) and duration of use are known.

Use gas filters with full face mask, where exposure limits may be exceeded for a short-term period, e.g. connecting or disconnecting containers.

Standard EN 137 - Self-contained open-circuit compressed air breathing apparatus with full face mask

When indicated by a risk assessment, Respiratory Protective Equipment must be used. The selection of the Respiratory Protective Device (RPD) must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected RPD.

Gas filters do not protect against oxygen deficiency.

Self contained breathing apparatus (SCBA) or positive pressure airline with mask are to be

used in oxygen-deficient atmospheres.

Standard EN 14387 - Gas filter(s), combined filter(s) and standard EN136, full face masks . Self contained breathing apparatus is recommended, where unknown exposure may be expected, e.g. during maintenance activities on installation systems.

None in addition to the above sections.

8.2.3. Environmental exposure controls

None necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Thermal hazards

Physical state at 20°C / 101.3kPa
 Colourless
 Odour
 Gas
 Colourless
 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 : Non flammable.

Explosive limits : Non flammable.

Lower explosion limit : Not available

Upper explosion limit : Not available

Vapour pressure [20°C] : Not applicable.

Vapour pressure [50°C] : Not applicable.

Density : Not applicable

Vapour density : Not applicable for gases and gas mixtures.

Relative density, liquid (water=1) : Not applicable Relative density, gas (air=1) : Heavier than air.

 $\mbox{Water solubility in water of component(s) of the mixture}: \\$

• Nitrogen: 20 mg/l • Carbon dioxide: 2000 mg/l Completely soluble. • Argon: 67.3 mg/l

· Helium: 1.5 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.

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosive properties : Not applicable.

Oxidising properties : Not applicable.



Page : 11/15 Revised edition no : 3.0

Revision date : 2023-01-23 Supersedes version of : 2020-07-01

Arcal 129

NOAL_1011

Country: NO / Language: EN

11/15

9.2.2. Other safety characteristics

Molar mass : Not applicable for gas mixtures.

Evaporation rate : Not applicable for gases and gas mixtures.

Other data : Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below

ground level.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal use.

Reactivity : None.

10.4. Conditions to avoid

Avoid moisture in installation systems.

10.5. Incompatible materials

For additional information on compatibility refer to ISO 11114.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not

be produced.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity : Toxicological effects not expected from this product if occupational exposure limit values are

not exceeded.

No known effects from this product. Skin corrosion/irritation : No known effects from this product. Serious eye damage/irritation : No known effects from this product. Respiratory or skin sensitisation : No known effects from this product. Germ cell mutagenicity No known effects from this product. Carcinogenicity : No known effects from this product. Toxic for reproduction: Fertility : No known effects from this product. Toxic for reproduction: unborn child : No known effects from this product. STOT-single exposure : No known effects from this product. STOT-repeated exposure

Aspiration hazard : Not applicable for gases and gas mixtures.

11.2. Information on other hazards

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

SECTION 12: Ecological information

12.1. Toxicity

Assessment : No ecological damage caused by this product.

EC50 48h - Daphnia magna [mg/l] : No data available.

AIR LIQUIDE NORWAY AS NO - en Drammensveien 64 B 3050 Mjøndalen NORWAY, + 47



Page: 12/15
Revised edition no: 3.0

Revision date : 2023-01-23 Supersedes version of : 2020-07-01

Arcal 129

NOAL_1011

Country: NO / Language: EN

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

12.2. Persistence and degradability

Assessment : No ecological damage caused by this product.

12.3. Bioaccumulative potential

Assessment : No data available.

12.4. Mobility in soil

Assessment : Because of its high volatility, the product is unlikely to cause ground or water pollution.

Partition into soil is unlikely.

12.5. Results of PBT and vPvB assessment

Assessment : Not classified as PBT or vPvB.

12.6. Endocrine disrupting properties

The substance/mixture has no endocrine disrupting properties.

12.7. Other adverse effects

Other adverse effects : No known effects from this product.

Effect on the ozone layer : None.

Effect on global warming : Contains greenhouse gas(es).

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.

Return unused product in original container to supplier.

List of hazardous waste codes (from Commission

Decision 2000/532/EC as amended)

: 16 05 05 : Gases in pressure containers other than those mentioned in 16 05 04.

13.2. Additional information

External treatment and disposal of waste should comply with applicable local and/or

national regulations.

SECTION 14: Transport information

14.1. UN number or ID number

In accordance with ADR / RID / IMDG / IATA / ADN

UN-No. : 1956

14.2. UN proper shipping name

Transport by road/rail (ADR/RID) : COMPRESSED GAS, N.O.S. (Argon, Helium)
Transport by air (ICAO-TI / IATA-DGR) : Compressed gas, n.o.s. (Argon, Helium)
Transport by sea (IMDG) : COMPRESSED GAS, N.O.S. (Argon, Helium)

14.3. Transport hazard class(es)

Labelling

2.2 : Non-flammable, non-toxic gases.



Page : 13/15
Revised edition no : 3.0

Revision date : 2023-01-23
Supersedes version of : 2020-07-01

Arcal 129 NOAL_10

NOAL_1011

Country: NO / Language: EN

Transport by road/rail (ADR/RID)

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 (ADR/RID) : Not established.
Transport by air (ICAO-TI / IATA-DGR) : Not established.
Transport by sea (IMDG) : Not established.

14.5. Environmental hazards

Transport by road/rail (ADR/RID) : 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 (ADR/RID) : P200

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

Passenger and Cargo Aircraft : 200.
Cargo Aircraft only : 200.
Transport by sea (IMDG) : P200

Special transport precautions : Avoid transport on vehicles where the load space is not separated from the driver's

compartment.

Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in

the event of an accident or an emergency.
Before transporting product containers:
- Ensure there is adequate ventilation.
- Ensure that containers are firmly secured.

Ensure valve is closed and not leaking.Ensure valve outlet cap nut or plug (where provided) is correctly fitted.

- Ensure valve protection device (where provided) is correctly fitted.

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 : None.

Contains no substance(s) listed on the REACH Candidate List

National legislation : Ensure all national/local regulations are observed.

Seveso Directive: 2012/18/EU (Seveso III) : Not covered.

National regulations

Ensure all national/local regulations are observed.

AIR LIQUIDE NORWAY AS NO - en 13/15



Page: 14/15 Revised edition no: 3.0

Revision date: 2023-01-23 Supersedes version of: 2020-07-01

NOAL 1011 Country: NO / Language: EN

Arcal 129

France		
Occupational diseases		
Code	Description	
RG 66	Occupational rhinitis and asthma	

Germany

: WGK nwg, Non-hazardous to water (Classification according to AwSV, Annex 1) Water hazard class (WGK)

National Rules and Recommendations : [German regulations] BetriebssicherheitsV mit TRBSen insbesondere TRBS 3145 / TRGS

: None of the components are listed

725 Ortsbewegliche Druckgasbehälter", TRBS 2141, BGRegel 500 Teil 2.33: "Umgang mit Gasen", GefahrstoffV mit Technischen Regeln Gefährliche Stoffe TRGS insbesondere TRGS 407 "Tätigkeiten mit Gasen - Gefährdungsbeurteilung", TRGS 400, 500, 510, 900."

Netherlands

SZW-lijst van kankerverwekkende stoffen

SZW-lijst van mutagene stoffen

SZW-lijst van reprotoxische stoffen – Borstvoeding

SZW-lijst van reprotoxische stoffen -

Vruchtbaarheid

SZW-lijst van reprotoxische stoffen - Ontwikkeling

Switzerland

Storage class (LK)

: LK 2 - Liquefied or pressurized gases

15.2. Chemical safety assessment

A CSA does not need to be carried out for this product.

SECTION 16: Other information

: Safety data sheet in accordance with commission regulation (EU) No 2020/878. Indication of changes

Abbreviations and acronyms : ATE - Acute Toxicity Estimate

> CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation

(EC) No 1907/2006

EINECS - European Inventory of Existing Commercial Chemical Substances

CAS# - Chemical Abstract Service number PPE - Personal Protection Equipment

LC50 - Lethal Concentration to 50 % of a test population

RMM - Risk Management Measures

PBT - Persistent, Bioaccumulative and Toxic vPvB - Very Persistent and Very Bioaccumulative

STOT- SE: Specific Target Organ Toxicity - Single Exposure

CSA - Chemical Safety Assessment

EN - European Standard

UN - United Nations

ADR - European Agreement concerning the International Carriage of Dangerous Goods by

Road

IATA - International Air Transport Association

IMDG code - International Maritime Dangerous Goods

RID - Regulations concerning the International Carriage of Dangerous Goods by Rail

WGK - Water Hazard Class

STOT - RE: Specific Target Organ Toxicity - Repeated Exposure

UFI: Unique Formula Identifier



Page : 15/15 Revised edition no: 3.0 Revision date: 2023-01-23 Supersedes version of: 2020-07-01

Arcal 129 **NOAL 1011**

Country: NO / Language: EN

Training advice

Further information

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..

: Classification using data from databases maintained by the European Industrial Gases Association (EIGA). Data is maintained in EIGA doc 169: 'Classification and Labelling Guide', downloadable at : http://www.eiga.eu.

Classification in accordance with the procedures and calculation methods of Regulation (EC) 1272/2008 (CLP).

Full text of H- and EUH-statements	
H280	Contains gas under pressure; may explode if heated.
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Press. Gas (Liq.)	Gases under pressure : Liquefied gas

DISCLAIMER OF LIABILITY

: Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out.

Details given in this document are believed to be correct at the time of going to press. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted.

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