

# SAFETY DATA SHEET

Based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

## carbon monoxide, compressed

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

#### 1.1 Product identifier:

Product name	: carbon monoxide, compressed
Synonyms	<ul> <li>AH1; carbonic oxide; carbon monooxide; carbon monoxide; carbon oxide; carbon oxide (CO); CO, compressed; monoxide of carbon; process stream; S-038</li> </ul>
Registration number REACH	: 01-2119480165-39
Product type REACH	: Substance/mono-constituent
CAS number	: 630-08-0
EC index number	: 006-001-00-2
EC number	: 211-128-3
RTECS number	: FG3500000
Molecular mass	: 28.01 g/mol
Formula	: CO

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

#### 1.2.1 Relevant identified uses

Industrial and professional use. Before use: carry out a risk assessment

## 1.2.2 Uses advised against

No uses advised against known

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

#### Supplier of the safety data sheet

BALCHEM NV Westvaartdijk 85 B-1850 Grimbergen Belgium +32 2 251 60 87 +32 2 252 17 51 info.grimbergen@balchem.com

#### **Distributor of the product**

BALCHEM NV Westvaartdijk 85 B-1850 Grimbergen Belgium +32 2 251 60 87 +32 2 252 17 51 info.grimbergen@balchem.com

#### 1.4 Emergency telephone number:

24h/24h (Telephone advice: English, French, German, Dutch):

+32 14 58 45 45 (BIG)

#### **SECTION 2: Hazards identification**

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

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Flam. Gas	category 1	H220: Extremely flammable gas.
Press. Gas	Compressed gas	H280: Contains gas under pressure; may explode if heated.
Repr.	category 1A	H360D: May damage the unborn child.
Acute Tox.	category 3	H331: Toxic if inhaled.
STOT RE	category 1	H372: Causes damage to organs through prolonged or repeated exposure if inhaled.

#### 2.2 Label elements:



Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG) Technische Schoolstraat 43 A, B-2440 Geel http://www.big.be © BIG vzw Publication date: 2015-06-25

Reference number: 3400

Product number: 10448

16453-469-en

134-

Signal word	Danger
H-statements	
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.
H360D	May damage the unborn child.
H331	Toxic if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure if inhaled.
P-statements	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves and protective clothing.
P260	Do not breathe gas.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P377	Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
Supplemental information	1
	Restricted to professional users.

#### 2.3 Other hazards:

May build up electrostatic charges: risk of ignition May be ignited by sparks Produces effects on the nervous system Obstructs oxygen absorption if inhaled

#### SECTION 3: Composition/information on ingredients

#### 3.1 Substances:

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark
carbon monoxide 01-2119480165-39	630-08-0 211-128-3	C>99%	Flam. Gas 1; H220 Press. Gas - Compressed gas; H280 Repr. 1A; H360D Acute Tox. 3; H331 STOT RE 1; H372	(1)(10)(2)	Mono-constituent

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

(1) For H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

#### 3.2 Mixtures:

Not applicable

#### SECTION 4: First aid measures

#### 4.1 Description of first aid measures:

#### General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

#### After inhalation:

Remove the victim into fresh air. Immediately consult a doctor/medical service.

After skin contact:

Rinse with water. Take victim to a doctor if irritation persists.

#### After eye contact:

Rinse with water. Take victim to an ophthalmologist if irritation persists.

#### After ingestion:

Not applicable.

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

#### 4.2.1 Acute symptoms

#### After inhalation:

Publication date: 2015-06-25

Feeling of weakness. Headache. Nausea. Vomiting. Dizziness. Visual disturbances. Auditory disturbances. Mental confusion. Rapid respiration. Accelerated heart action. Emotional instability. Impaired memory. Coordination disorders. Respiratory difficulties. Disturbances of consciousness. Brain affection. Cramps/uncontrolled muscular contractions. Respiratory collapse. ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Cardiac and blood circulation effects. Impairment of the nervous system.

After skin contact:

Unlikely to cause harmful effects.

After eye contact:

Unlikely to cause harmful effects.

After ingestion:

Not applicable. 4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

#### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media:

5.1.1 Suitable extinguishing media:

Water. BC powder. Carbon dioxide.

- 5.1.2 Unsuitable extinguishing media:
  - No unsuitable extinguishing media known.

#### 5.2 Special hazards arising from the substance or mixture:

#### 5.3 Advice for firefighters:

#### 5.3.1 Instructions:

If no hazard for/from the surroundings: controlled burning. If hazardous substances are nearby: consider extinguishment. Extinguish only if gas supply/leak can be shut afterwards. Cool tanks/drums with water spray/remove them into safety. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistant risk of physical explosion.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Compressed air/oxygen apparatus.

#### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Keep upwind. Close doors and windows of adjacent premises. Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.

See heading 8.2

#### 6.2 Environmental precautions:

Contain released substance, pump into suitable containers. Plug the leak, cut off the supply.

#### 6.3 Methods and material for containment and cleaning up:

Damaged/cooled tanks must be emptied. Do not use compressed air for pumping over spills. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

#### 6.4 Reference to other sections:

See heading 13.

## SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 7.1 Precautions for safe handling:

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Observe very strict hygiene - avoid contact.

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

#### 7.2.1 Safe storage requirements:

Storage temperature: <50 °C. Store below 50°C. Store in a dark area. Keep container in a well-ventilated place. Fireproof storeroom. Keep locked up. Provide for an automatic sprinkler system. Provide the tank with earthing. Meet the legal requirements.

#### 7.2.2 Keep away from:

Heat sources, ignition sources, combustible materials, oxidizing agents, highly flammable materials, metals, halogens.

#### 7.2.3 Suitable packaging material:

Publication date: 2015-06-25

Stainless steel, carbon steel.

7.2.4 Non suitable packaging material:

Nickel, iron.

#### 7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

#### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters:

#### 8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

#### The Netherlands

Koolmonoxide	Time-weighted average exposure limit 8 h (Public occupational exp limit value)	osure 25 ppm
	Time-weighted average exposure limit 8 h (Public occupational exp limit value)	oosure 29 mg/m <sup>3</sup>
Belgium		
Carbone (oxyde de)	Time-weighted average exposure limit 8 h	25 ppm
	Time-weighted average exposure limit 8 h	29 mg/m <sup>3</sup>
. ,	Time-weighted average exposure limit 8 h Time-weighted average exposure limit 8 h (TLV - Adopted Value)	29 mg/m <sup>3</sup>
Carbon monoxide		
USA (TLV-ACGIH) Carbon monoxide Germany Kohlenstoffmonoxid		

Trance		
Carbone (oxyde de)	Time-weighted average exposure limit 8 h (VL: Valeur non	50 ppm
	réglementaire indicative)	
	Time-weighted average exposure limit 8 h (VL: Valeur non	55 mg/m³
	réglementaire indicative)	-
	•	

#### UΚ

Carbon monoxide	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	30 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	35 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	200 ppm
	Short time value (Workplace exposure limit (EH40/2005))	232 mg/m³

b) National biological limit values

If limit values are applicable and available these will be listed below.

#### 8.1.2 Sampling methods

Test	Number
NIOSH	6604
OSHA	ID 209
OSHA	ID 210
	NIOSH OSHA

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

## 8.1.4 DNEL/PNEC values

#### DNEL - Workers

carbon	monoxid	e, con	pressed

Effect level (DNEL/DMEL)	Туре	Value	Remark
DNEL	Long-term systemic effects inhalation	23 mg/m³	
	Acute systemic effects inhalation	117 mg/m³	
	Long-term local effects inhalation	23 mg/m³	
	Acute local effects inhalation	117 mg/m³	

#### 8.1.5 Control banding

If applicable and available it will be listed below.

#### 8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 8.2.1 Appropriate engineering controls

Publication date: 2015-06-25

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly. Work under local exhaust/ventilation.

#### 8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Gas mask with filter type CO. Self-contained breathing apparatus.

b) Hand protection:

Gloves.

materials (good resistance)

Polyethylene, PVC, viton.

- materials (less resistance)

Natural rubber, neoprene.

c) Eye protection:

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

#### SECTION 9: Physical and chemical properties

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

Physical form	Compressed gas
Odour	Odourless
Odour threshold	Not applicable
Colour	Colourless
Particle size	Not applicable (gas)
Explosion limits	12.50 - 74 vol %
	145 - 870 g/m³
Flammability	Extremely flammable gas.
Log Kow	1.78 ; Weight of evidence approach
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	-205 °C
Boiling point	-192 °C
Flash point	No data available
Evaporation rate	No data available
Relative vapour density	0.970
Vapour pressure	30609 hPa ; -143 °C
Solubility	water ; 0.023 g/100 ml
	ethanol ; 0.19 g/100 ml
	acetone ; 0.25 g/100 ml
Relative density	0.790 ; -192 °C
Decomposition temperature	No data available
Auto-ignition temperature	605 °C
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with oxidising properties
рН	No data available

#### 9.2 Other information:

Minimum ignition energy	< 0.3 mJ
Critical temperature	-140 °C
Critical pressure	35000 hPa
Surface tension	0.098 N/m ; -192 °C
Absolute density	1.25 kg/m³

#### SECTION 10: Stability and reactivity

#### 10.1 Reactivity:

May build up electrostatic charges: risk of ignition. May be ignited by sparks.

#### 10.2 Chemical stability:

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions:

Reacts with many compounds e.g.: with (strong) oxidizers: (increased) risk of fire/explosion. Reacts on exposure to light with (some) halogens: release of (highly) toxic gases/vapours. Violent to explosive reaction with (some) halogens compounds. Reacts upon a rise of pressure with (some) metals: release of explosive compounds.

#### 10.4 Conditions to avoid:

Publication date: 2015-06-25

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

#### 10.5 Incompatible materials:

Combustible materials, oxidizing agents, highly flammable materials, metals, halogens.

#### 10.6 Hazardous decomposition products:

No data available.

## SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects:

11.1.1 Test results

#### Acute toxicity

#### carbon monoxide, compressed

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral						Data waiving	
Dermal						Data waiving	
Inhalation (gases)	LC50	Equivalent to OECD 403	1300 ppm	4 h	Rat (male)	Experimental value	

#### **Conclusion**

Toxic if inhaled. Not classified as acute toxic in contact with skin

Not classified as acute toxic if swallowed

#### **Corrosion/irritation**

#### carbon monoxide, compressed

Route of exposure	Result	Method	Exposure time	Time point	Species	Value	Remark
						determination	
Eye						Data waiving	
Skin						Data waiving	

#### **Conclusion**

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

#### Respiratory or skin sensitisation

#### carbon monoxide, compressed

Route of e	exposure	Result	Method	 Observation time point	Species	Value determination	Remark
Skin						Data waiving	
Inhalation	ı (gases)					Data waiving	

**Conclusion** 

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

#### Specific target organ toxicity

#### carbon monoxide, compressed

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time		Value determination
Oral								Data waiving
Dermal								Data waiving
Inhalation (gases)	LOAEC		F F		Cardiac and blood circulation	( <i>n</i>	Rat (female)	Experimental value
					effects			

#### Conclusion

Causes damage to organs through prolonged or repeated exposure if inhaled.

Not classified as sub-chronically toxic in contact with skin

Not classified as sub-chronically toxic if swallowed

#### Mutagenicity (in vitro)

carbon monoxide, compressed No (test)data available

#### Mutagenicity (in vivo)

Publication date: 2015-06-25

carbon monoxide, compressed

No (test)data available

#### Carcinogenicity

#### carbon monoxide, compressed

Route of	Parameter	Method	Value	Exposure time	Species	Value	Organ	Effect
exposure						determination		
Inhalation	NOAEC	Equivalent to	200 ppm	72 weeks (daily, 5	Rat (female)	Experimental		No carcinogenic
(gases)		OECD 453		days/week)		value		effect

#### **Reproductive toxicity**

#### carbon monoxide, compressed

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value
								determination
Developmental toxicity	NOAEC		65 ppm	12 days (gestation, daily)	Mouse	No effect		Experimental value
Maternal toxicity	NOAEC		500 ppm	12 days (gestation, daily)	Mouse (female)	No effect		Experimental value
Effects on fertility								Data waiving

Conclusion CMR

May damage the unborn child.

Not classified for carcinogenicity

Not classified for mutagenic or genotoxic toxicity

#### **Toxicity other effects**

carbon monoxide, compressed

No (test)data available

Chronic effects from short and long-term exposure

carbon monoxide, compressed

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Cardiac and blood circulation effects. Impairment of the nervous system.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity:

#### carbon monoxide, compressed

	Parameter	Method	Value	Duration	Species	 Fresh/salt water	Value determination
Acute toxicity fishes	LC50		672.6 mg/l	96 h	Pisces		QSAR
Acute toxicity invertebrates	LC50		307.5 mg/l	48 h	Daphnia sp.		QSAR
Toxicity algae and other aquatic plants	EC50		124.4 mg/l	96 h	Algae		QSAR

#### **Conclusion**

Slightly harmful to fishes Slightly harmful to invertebrates (Daphnia) Slightly harmful to algae Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

#### 12.2 Persistence and degradability:

#### carbon monoxide, compressed

н	Half-life Soli (11/2 Soli)									
	Method	Value	Primary degradation/mineralisation	Value determination						
				Not applicable (gas)						

#### **Conclusion**

Biodegradability: not applicable

#### 12.3 Bioaccumulative potential:

carbon monoxide, compressed

Lo	Log Kow								
	Method	Remark	Value	Temperature	Value determination				
			1.78		Weight of evidence approach				

Publication date: 2015-06-25

#### **Conclusion**

Low potential for bioaccumulation (Log Kow < 4)

#### 12.4 Mobility in soil:

#### carbon monoxide, compressed

#### Volatility (Henry's Law constant H)

[	Value	Method	Temperature	Remark	Value determination
	115561 atm m³/mol		25 °C		Calculated value

#### **Conclusion**

Not applicable (gas)

#### 12.5 Results of PBT and vPvB assessment:

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances.

#### 12.6 Other adverse effects:

carbon monoxide, compressed

Global warming potential (GWP)

Not included in the list of fluorinated greenhouse gases (Regulation (EC) No 517/2014)

#### **Ozone-depleting potential (ODP)**

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

#### SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 13.1 Waste treatment methods:

#### 13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

16 05 04\* (gases in pressure containers and discarded chemicals: gases in pressure containers (including halons) containing dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Regulation (EU) No 1357/2014.

#### 13.1.2 Disposal methods

Refer to manufacturer/supplier for information on recovery/ recycling. Incinerate under surveillance with energy recovery. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

#### 13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 10\* (packaging containing residues of or contaminated by dangerous substances).

## SECTION 14: Transport information

#### Road (ADR)

14.1 UN number:		
UN number	1016	
14.2 UN proper shipping name:		
Proper shipping name	Carbon monoxide, compressed	
14.3 Transport hazard class(es):		
Hazard identification number	263	
Class	2	
Classification code	1TF	
14.4 Packing group:		
Packing group		
Labels	2.3+2.1	
14.5 Environmental hazards:		
Environmentally hazardous substance mark	no	
14.6 Special precautions for user:		
Special provisions		
Limited quantities	none.	
Rail (RID)		
14.1 UN number:		
UN number	1016	
14.2 UN proper shipping name:		
Proper shipping name	Carbon monoxide, compressed	
14.3 Transport hazard class(es):		
Hazard identification number	263	
	Publication date: 2015-06-25	

	Reference number: 3400	
Revision number: 0000	Product number: 10448	8/11

#### aavida mnraccad - -- - -\_ ~ •

	Class	2
	Classification code	1TF
14.	4 Packing group:	
	Packing group	
	Labels	2.3+2.1 (+13)
	5 Environmental hazards:	
	Environmentally hazardous substance mark	no
14.	6 Special precautions for user:	
	Special provisions	
	Limited quantities	none.
lan	d waterways (ADN)	
14.	1 UN number:	
	UN number	1016
14.	2 UN proper shipping name:	
	Proper shipping name	Carbon monoxide, compressed
14.	3 Transport hazard class(es):	
	Class	2
	Classification code	1TF
14.	4 Packing group:	
	Packing group	2.2.2.1
11	Labels 5 Environmental hazards:	2.3+2.1
	Environmentally hazardous substance mark	no
	6 Special precautions for user:	10
14.	Special provisions	
	Limited quantities	none.
	IMDG/IMSBC)	
14.	1 UN number:	line
	UN number	1016
	2 UN proper shipping name:	Carbon monovido, compressed
	Proper shipping name 3 Transport hazard class(es):	Carbon monoxide, compressed
14.	Class	2.3
14.	4 Packing group:	2.0
	Packing group	
	Labels	2.3 + 2.1
14.	5 Environmental hazards:	
	Marine pollutant	-
	Environmentally hazardous substance mark	no
14.	6 Special precautions for user:	
	Special provisions	
	Limited quantities	none.
	7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Net employed.
	Annex II of MARPOL 73/78	Not applicable
ir (I	CAO-TI/IATA-DGR)	
14.	1 UN number:	
	Transport	Forbidden
	UN number	1016
	2 UN proper shipping name:	
	Proper shipping name	Carbon monoxide, compressed
14.	3 Transport hazard class(es):	
	Class	2.3
14.	4 Packing group:	
	Packing group	
14	Labels 5 Environmental hazards:	
	Environmentally hazardous substance mark	no
	6 Special precautions for user:	טוון
14.	Special provisions	A2
	Passenger and cargo transport: limited quantities: maximum net quantit	
	per packaging	·
	· · · · ·	
	N 15: Regulatory information	

European legislation:

Publication date: 2015-06-25

VOC content Directive 2	010/75/EU	
VOC content		Remark
		Not applicable (inorganic)
		restrictions on the manufacture, placing on the market and use of certain
0		Conditions of restriction
arbon monoxide	Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 classified as toxic to reproduction category 1A or 18 (Table 3.1) or toxic to reproduction category 1 or 2 (Table 3.2) and listed as follows: - Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5 - Reproductive toxicant category 1B adverse effects on sexual function and fertility or on development (Table 3.1) or reproductive toxicant category 2 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 6	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant concentration specified in Directive 1999/45/EC where no specific concentration limit is set out in Part 3 of Annex VI to Regulation (EC) No 1272/2008. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: "Restricted to professional users".2. By way derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists' paints covered by Directive 1999/45/EC; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogat shall apply until the said date.
arbon monoxide	category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:     — metallic glitter intended mainly for decoration,     — artificial snow and frost,     — "whoopee" cushions,     — silly string aerosols,     — initation excrement,     — horns for parties,     — decorative flakes and foams,     — artificial cobwebs,     — strik bombs.2. Without prejudice to the application of other Community provisions on     classification, packaging and labelling of substances, suppliers shall ensure before the place     on the market that the packaging of aerosol dispensers referred to above is marked visibly     legibly and indelibly with:     "For professional users only".3. By way of derogation, paragraphs 1 and 2 shall not apply t     the aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unl     they conform to the requirements indicated.

# National legislation The Netherlands Waste identification (the Netherlands): LWCA (the Netherlands): KGA category 06 Netherlands) SZW - List of reprotoxic substances (development) Hazardous to the foetus Waterbezwaarlijkheid 5

#### National legislation Germany

Schwangerschaft Gruppe	В					
WGK	1; Classification water polluting in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July					
	2005 (Anhang 2)					
TA-Luft	5.2.7.1.3					

## No data available

#### National legislation Belgium

No data available

## Other relevant data

No data available

#### **15.2 Chemical safety assessment:**

Reference number: 3400	
Product number: 10448	

A chemical safety assessment has been performed.

#### SECTION 16: Other information

#### Full text of any H-statements referred to under headings 2 and 3:

- H220 Extremely flammable gas.
- H280 Contains gas under pressure; may explode if heated.
- H331 Toxic if inhaled.
- H360D May damage the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
- (\*) = INTERNAL CLASSIFICATION BY BIG
- PBT-substances = persistent, bioaccumulative and toxic substances
- CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this are is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

Publication date: 2015-06-25