

Weldtite Products Ltd.

Barton-on Humber North Lincolnshire DN 18 5RP

Date printed 03.07.2015, Revision 03.07.2015

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SECTION 1: Identification of the substance/mixture and of the company/undertaking
1.1 Product identifier
Weldtite Jetvalve & Jet (CO₂) Filled Gas Cylinder 07007, 07008 & 07009

IUPAC	Carbon dioxide (EU occupational exposure limit value)
EINECS/ELINCS	204-696-9
CAS	124-38-9

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

See product information.

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company	Weldtite Products Ltd. Unit 9, Harrier Road, Humber Ind. Estate Barton-on Humber North Lincolnshire DN 18 5RP / UK Phone 0044-1652-660000 Fax 0044-1652-660066 Homepage www.-weldtite.-co.-uk E-mail sales@weldtite.co.uk
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Address enquiries to

Technical information	sales@weldtite.co.uk
Safety Data Sheet	sdb@chemiebuero.de

1.4 Emergency telephone number

Company	+44 (0) 1652 660000 Mo-Fr 8:00 - 17:00
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SECTION 2: Hazards identification
2.1 Classification of the substance or mixture

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

2.2 Label elements

The product is classified and required to be labelled in accordance with EC-Directives

Hazard pictograms

Signal word

WARNING

Contains:

Carbon dioxide (EU occupational exposure limit value) EINECS: 204-696-9

Hazard statements

H280 Contains gas under pressure; may explode if heated.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P410+P403 Protect from sunlight. Store in a well-ventilated place.

2.3 Other hazards
Physico-chemical hazards

Heat causes increase in pressure and risk of bursting.

Human health dangers

Asphyxiant in high concentrations.
 Contact with solid CO₂ (carbon dioxide snow) and liquid CO₂ may cause cryogenic burns/frostbite.

Environmental hazards

Does not contain any PBT or vPvB substances.

Other hazards

Further hazards were not determined with the current level of knowledge.

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SECTION 3: Composition / Information on ingredients

Product-type:

The product is a substance.

Range [%]	Substance
100	Carbon dioxide (EU occupational exposure limit value)
	CAS: 124-38-9, EINECS/ELINCS: 204-696-9
	GHS/CLP: Press. Gas (*): H280

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Fresh air, oxygen or, if necessary, artificial ventilation.

Inhalation

Ensure supply of fresh air.
Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

Skin contact

In case of contact with skin wash off with warm water.
In the event of symptoms seek medical treatment.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supply with medical care.

Ingestion

not applicable

4.2 Most important symptoms and effects, both acute and delayed

Headache
Unconsciousness
Nausea, vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

All extinguishing media are suitable but method must take into account the surrounding area to minimize dispersion.

Extinguishing media that must not be used

Full water jet.

5.2 Special hazards arising from the substance or mixture

Bursting gas cylinder can be forcibly projected from a fire.

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Cool containers at risk with water spray jet.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

6.2 Environmental precautions

Do not discharge into the drains.

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6.3 Methods and material for containment and cleaning up

Take up mechanically.

Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Use only in well-ventilated areas.

Keep away from open flames, hot surfaces and sources of ignition.

Do not smoke.

Wash hands before breaks and after work.

Do not eat, drink, smoke or take drugs at work.

7.2 Conditions for safe storage, including any incompatibilities

Do not store together with food and animal food/diet.

Do not store with combustible materials.

Protect from heat/overheating.

Keep in a cool place, heat causes increase in pressure and risk of bursting.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C.

Keep container in a well-ventilated place.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection**8.1 Control parameters****Ingredients with occupational exposure limits to be monitored (GB)**

Range [%]	Substance
100	Carbon dioxide (EU occupational exposure limit value)
	CAS: 124-38-9, EINECS/ELINCS: 204-696-9
	Long-term exposure: 5000 ppm, 9150 mg/m ³
	Short-term exposure (15-minute): 15000 ppm, 27400 mg/m ³

Ingredients with occupational exposure limits to be monitored (EU)

Range [%]	Substance / EC LIMIT VALUES
100	Carbon dioxide (EU occupational exposure limit value)
	CAS: 124-38-9, EINECS/ELINCS: 204-696-9
	Eight hours: 5000 ppm, 9000 mg/m ³

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8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Use suitable exhaust ventilation.
Eye protection	Safety glasses.
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. Butyl rubber, >120 min (EN 374).
Skin protection	Not required under normal conditions.
Other	Do not inhale gases. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	If ventilation is insufficient, wear respiratory protection. Short term: filter apparatus, filter B.
Thermal hazards	See SECTION 7.
Delimitation and monitoring of the environmental exposition	Comply with applicable environmental regulations limiting discharge to air, water and soil.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form	liquefied pressure gas capsule
Color	colourless
Odor	odourless
Odour threshold	not determined
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	-78,5 (Sublimation point)
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	57,3 bar (20°C)
Density [g/ml]	1,52 (Gas) 0,82 (Liquid)
Bulk density [kg/m³]	not applicable
Solubility in water	2000 mg/l
Partition coefficient [n-octanol/water]	No information available.
Viscosity	not applicable
Relative vapour density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	not applicable
Decomposition temperature [°C]	not applicable

9.2 Other information

Triple point: -56,6 °C (5,185 bar)
Critical temperature: 31 °C
Critical pressure: 73,825 bar

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SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.
Heat causes increase in pressure and risk of bursting.

10.2 Chemical stability

The product is stable under standard conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Respiratory or skin sensitisation	Based on available data, the classification criteria are not met.
Specific target organ toxicity — single exposure	Based on available data, the classification criteria are not met.
Specific target organ toxicity — repeated exposure	Based on available data, the classification criteria are not met.
Mutagenicity	Based on available data, the classification criteria are not met.
Reproduction toxicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
General remarks	Asphyxiant in high concentrations.

SECTION 12: Ecological information

12.1 Toxicity

Range [%]	Substance
100	Carbon dioxide (EU occupational exposure limit value), CAS: 124-38-9
	LC50, (96h), <i>Oncorhynchus mykiss</i> : 35 mg/L.

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	No information available.

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12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

not applicable

12.6 Other adverse effects

Global-warming potential: 1.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

For recycling, consult manufacturer.

Waste no. (recommended)

160505

Contaminated packaging

Uncontaminated packaging may be taken for recycling.

Waste no. (recommended)150104
150111***SECTION 14: Transport information****14.1 UN number**

See SECTION 14.2 in accordance with UN shipping name

14.2 UN proper shipping name**Transport by land according to ADR/RID**

UN 1013 Carbon dioxide (To the regulations ADR is not subject after special regulation 584) 2.2

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code)

Inland navigation (ADN)

UN 1013 Carbon dioxide (To the regulations ADR is not subject after special regulation 584) 2.2

Marine transport in accordance with IMDG

UN 2037 Receptacles, small, containing gas (To the regulations IMDG is not subject after special regulation 191) 2

Air transport in accordance with IATA

UN 1013 Carbon dioxide (according to the IATA, Chapter 4.2, column F, the cylinders are dangerous goods in excepted quantities. The code for excepted quantities is "E1") 2.2

- Label**14.3 Transport hazard class(es)**

See SECTION 14.2 in accordance with UN shipping name

14.4 Packing group

See SECTION 14.2 in accordance with UN shipping name

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14.5 Environmental hazards

See SECTION 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

No information available.

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

EEC-REGULATIONS	1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC; (EU) 2015/830
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2015); IMDG-Code (2015, 37. Amdt.); IATA-DGR (2015).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4
- Observe employment restrictions for people	Observe employment restrictions for young people.
- VOC (1999/13/CE)	not applicable

15.2 Chemical safety assessment

For this substance a chemical safety assessment is not required.

SECTION 16: Other information**16.1 Hazard statements (SECTION 3)**

H280 Contains gas under pressure; may explode if heated.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging
 DMEL = Derived Minimum Effect Level
 DNEL = Derived No Effect Level
 EC50 = Median effective concentration
 ECB = European Chemicals Bureau
 EEC = European Economic Community
 EINECS = European Inventory of Existing Commercial Chemical Substances
 ELINCS = European List of Notified Chemical Substances
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IC50 = Inhibition concentration, 50%
 IMDG = International Maritime Code for Dangerous Goods
 IUCLID = International Uniform Chemical Information Database
 LC50 = Lethal concentration, 50%
 LD50 = Median lethal dose
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 TLV@/TWA = Threshold limit value – time-weighted average
 TLV@STEL = Threshold limit value – short-time exposure limit
 VOC = Volatile Organic Compounds
 vPvB = very Persistent and very Bioaccumulative

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16.3 Other information**Classification procedure**

Press. Gas (Liquefied gas): H280 Contains gas under pressure; may explode if heated.
(Minimum classification)

Modified position

SECTION 2 been added: Contact with solid CO₂ (carbon dioxide snow) and liquid CO₂ may cause cryogenic burns/frostbite.

SECTION 4 been added: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SECTION 4 been added: Supply with medical care.

SECTION 4 been added: Fresh air, oxygen or, if necessary, artificial ventilation.

SECTION 4 deleted: Not required under normal conditions.

SECTION 5 been added: All extinguishing media are suitable but method must take into account the surrounding area to minimize dispersion.

SECTION 7 been added: Do not store with combustible materials.

SECTION 7 been added: Keep away from open flames, hot surfaces and sources of ignition.

SECTION 8 been added: Short term: filter apparatus, filter B.

SECTION 8 been added: Not required under normal conditions.

SECTION 9 been added: (Gas)

SECTION 11 been added: Based on available data, the classification criteria are not met.

SECTION 12 deleted: not determined

SECTION 12 been added: No information available.

SECTION 12 deleted: No information available.

SECTION 12 been added: Global-warming potential: [x].

SECTION 13 been added:

SECTION 15 been added: not applicable

SECTION 15 been added: TRGS 510: Storage of hazardous substances in non-stationary containers

SECTION 15 been added: -

SECTION 15 been added: TRGS 400: Risk assessment

SECTION 16 been added: Minimum classification

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