



CARGAS GAS
Code: AX1400000



1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

- 1.1 Product description: CARGAS GAS
Code: AX1400000
- 1.2 Intended uses: Aerosol.
- 1.3 Company: MONTANA COLORS, S.L
Pol. Ind. Plà de les Vives - c/AnaisNin 6 - E-08295 Sant Vicenç de Castellet (Barcelona)
Phone: +34 93 8332760 - Fax: +34 93 8332761 - e-mail: msds@montanacolors.com
- 1.4 Emergency phone number: +34 93 8332787 (9:00-17:00 h.) (working hours)

2. HAZARDS IDENTIFICATION

- 2.1 EC classification:  F+:R12 | R18
- 2.2 Adverse effects:
Extremely flammable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Chemical description:
Dimethyl ether.

CH₃-O-CH₃

3.2 Ingredients:

50 < 100 %	Dimethyl ether	EC 204-065-8	Index No. 603-019-00-8
 <input type="checkbox"/> <input type="checkbox"/>	F+:R12	CAS 115-10-6	

For more information, see sections 8, 11, 12 and 16.

- Pre-registration REACH: Substance included in the list of pre-registered substances, published by the 'European chemicals agency' (ECHA), in accordance with Article 28 of Regulation (EC) no. 1907/2006.
Additional information: <http://apps.echa.europa.eu/preregistered/pre-registered-sub.aspx>

4. FIRST AID MEASURES



When in doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

- 4.1 By inhalation:
Should there be any symptoms, transfer the person affected to the open air.
- 4.2 By contact with the skin:
Remove immediately contaminated clothing. Wash thoroughly the affected area with plenty of cold or lukewarm water and neutral soap, or use a suitable skin cleanser.
- 4.3 By contact with eyes:
Remove contact lenses. Rinse eyes copiously by irrigation with plenty of clean, fresh water, holding the eyelids apart. Call a physician immediately.
- 4.4 By ingestion:
Not applicable.
- 4.5 Notes to physician:
Not available.



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5. FIRE-FIGHTING MEASURES

5.1 Means of extinction:

Extinguishing powder or CO₂. In the case of more important fires, also alcohol resistant foam and water spray/mist. Do not use for extinguishing: direct water jet.

5.2 Specific risks:

Flammable gas. Decomposes when heated intensely. As consequence of combustion or thermal decomposition, hazardous products may be produced: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products may be a hazard to health.

5.3 Fire-proof protective equipment:

Depending on magnitude of fire, heat-proof protective clothing may be required, appropriate independent breathing apparatus, gloves, protective glasses or face masks and boots.

5.4 Other recommendations:

Cool with water the tanks, cisterns or containers close to sources of heat or fire. Bear in mind the direction of the wind. Do not allow fire-fighting residue to enter drains, sewers or water courses.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions:

Eliminate possible sources of ignition and when appropriate, ventilate the area. Do not smoke. Avoid direct contact with this product. Avoid breathing vapours. For exposure controls and personal protection measures, see section 8.

6.2 Environmental precautions:

Avoid contamination of drains, surface or subterranean water and soil. In the case of large scale spills or when the product contaminates lakes, rivers or sewages, inform the appropriate authorities in accordance with local regulations.

6.3 Cleaning-up methods:

Contain and mop up spills with non-combustible absorbent materials (earth, sand, vermiculite, diatomaceous earth, etc.). Keep the remains in a closed container. For subsequent waste disposal, follow the recommendations in section 13.



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7. HANDLING AND STORAGE

7.1 Handling precautions:

Comply with the existing legislation on health and safety at work.

- **General recommendations:** Avoid any type of leakage or escape.
- **Recommendations for the prevention of fire and explosion risks:** Pressurised container. Protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material.
 - **Flash point** : -41. °C
 - **Autoignition temperature** : 350. °C
- **Recommendations for the prevention of toxicological risks:** Do not eat, drink or smoke while handling. After handling, wash hands with soap and water. Avoid applying the product directly to people, animals, plants or foodstuffs. For exposure controls and personal protection measures, see section 8.
- **Recommendations for the prevention of environmental contamination:** It is not considered a danger to the environment. In the case of accidental spillage, follow the instructions indicated in section 6.

7.2 Storage conditions:

Prevent unauthorized access. Keep out of reach of children. This product should be stored isolated from heat and electrical sources. Do not smoke in storage area. If possible, avoid direct contact with sunlight. Avoid extreme humidity conditions. For more information, see section 10.

- **Class of store** : According to current legislation.
- **Temperature interval** : min: 5. °C, max: 50. °C
- **Incompatible materials:** Keep away from oxidizing agents, acids.
- **Type of packaging:** According to current legislation.
- **Limit quantity, in accordance with Directive 96/82/EC~2003/105/EC (Seveso III):**
Lower threshold: 10 tons , Upper threshold: 50 tons

7.3 Specific uses:

For the use of this product do not exist particular recommendations apart from that already indicated.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION 98/24/EC

8.1 Exposure Limit Values (TLV)

AGCIH 2008	TLV-TWA		TLV-STEL		Year
	ppm	mg/m ³	ppm	mg/m ³	
Dimethyl ether	1000.	1920.			Recommended

TLV - Threshold Limit Value, TWA - Time Weighted Average, STEL - Short Term Exposure Limit.

8.2 Occupational exposure controls, Directive 89/686/EEC:

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these measures are not sufficient to maintain concentrations of vapours below the Occupational Exposure Limits, suitable respiratory protection must be worn.

- Ventilation requirement : 344. m³/l (maximal) Air/Preparation
to keep below the Occupational Exposure Limit of the product.

- Protection of respiratory system:

Avoid the inhalation of solvents.

- Mask:

Mask for gases and vapours (EN141). In order to obtain a suitable protection level, the filter class must be selected depending on the type and concentration of the contaminating agents present, in accordance with the specifications supplied by the filter producers.

- Protection of eyes and face:

Install emergency eye baths close to the working area.

- Goggles:

Advisable.

- Face shield:

No.

- Protection of hands and skin:

Install emergency showers close to the working area. Barrier creams may help to protect the exposed areas of the skin. Barrier creams should not be applied once exposure has occurred.

- Gloves:

Solvent-resistant gloves (EN374). The gloves should be immediately replaced when any sign of degradation is noted.

- Boots:

No.

- Apron:

No.

- Clothing:

Advisable.

8.3 Environmental exposure controls:

Avoid any spillage in the environment. Avoid any release into the atmosphere.





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9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state	:	Gas.	
- Colour	:	Colourless.	
- Odour	:	Characteristic	
- Initial boiling point	:	-23.7 - °C	at 760 mmHg
- Flash point	:	-41.	°C
- Vapour pressure	:	530.6	kPa at 20°C
- Vapour pressure	:	1210.	kPa at 50°C
- Specific gravity	:	0.661	g/cm ³ at 20°C
- Solubility in water	:	Not miscible	
- Molecular weight (numeric)	:	46.08	g/mol MWn
- Melting point	:	-138.5	°C
- VOC (supply)	:	100.0	% Weight
- VOC (supply)	:	661.0	g/l

For additional information concerning physical and chemical properties related to safety and environment, see sections 7 and 12.

10. STABILITY AND REACTIVITY

10.1 Conditions to avoid:

Stable under recommended storage and handling conditions.

- Heat: Keep away from sources of heat.
- Light: Avoid direct contact with sunlight.
- Air: Not applicable.
- Humidity: Avoid extreme humidity conditions.
- Pressure: Not applicable.
- Shock: Not applicable.

10.2 Materials to avoid:

Possible dangerous reaction with oxidizing agents, acids.

10.3 Thermal decomposition:

As consequence of thermal decomposition, hazardous products may be produced: carbon monoxide.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

- Exposure to solvent vapour concentrations in excess of the stated occupational exposure limit, may result in adverse health effects, such as mucous membrane and respiratory system irritation and adverse effects on kidneys, liver and central nervous system. Symptoms and signs include: headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, unconsciousness. Ingestion may result in the following effects: sore throat, abdominal pain, drowsiness, nausea, vomiting and diarrhoea; other effects may be as described for exposure to vapours. Repeated or prolonged contact with the solvents of the preparation, may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. Liquid splashes in the eyes may cause irritation and reversible damage.

11.2 Dose and lethal concentrations :

	DL50 Oral mg/kg	DL50 Cutaneous mg/kg	CL50 Inhalation mg/m ³ .4hours
Dimethyl ether			308500. Rat



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12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Dimethyl ether

CL50
mg/l.96hours

4000. Fishes

CE50
mg/l.48hours

4000. Daphnia

CE50
mg/l.72hours

12.2 Mobility in soil:

Not available.

- Spills on the soil: Prevent contamination of soil.

- Spills in water: Do not allow to escape into drains, sewers or water courses.

- Emissions to the atmosphere: Because of volatility, emissions to the atmosphere while handling and use may result, in special when it is used as a solvent. When possible, avoid solvent release to the atmosphere; do not pulverize more than is strictly necessary.

- VOC (industrial installations):

· If this product is used in an industrial installation, it must be verified if it is applicable the Directive 1999/13/EC, on the limitation of emissions of volatile compounds due to the use of organic solvents in certain activities and installations: Solvents : 100.0% Weight , VOC (supply) : 100.0% Weight , VOC : 52.1% C (expressed as carbon) , Molecular weight (average) : 46.1 , Number C atoms (average) : 2.0.

12.3 Persistence and degradability:

Not available.

12.4 Bioaccumulative potential:

Not available.

- Partition coefficient: n-octanol/water :

-0.18 (as log Pow)

- Bioconcentration factor :

1.7 BCF

(OECD 305)

12.5 Results of PBT and mPmB assesment, in accordance with Annex XIII of Regulation (EC) no. 1907/2006:

Not available.

12.6 Other adverse effects:

13. DISPOSAL CONSIDERATIONS

13.1 Handling of waste, Directive 75/442/EEC~91/156/EC:

Take all necessary measures to prevent the production of waste whenever possible. Analyse possible methods for revaluation or recycling. Do not discharge into drains or the environment, dispose of at an authorised waste collection point. Waste should be handled and disposed of in accordance with current local and national regulations. For exposure controls and personal protection measures, see section 8.

13.2 Disposal of empty containers, Directive 94/62/EC~2004/12/EC:

Emptied containers and packaging should be disposed of in accordance with currently local and national regulations. Ensure the container is completely empty before throwing it away.

13.3 Procedures for neutralising or destroying the product:

Controlled incineration in special facilities for chemical waste, but in accordance with local regulations. Do not incinerate closed containers.



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14. TRANSPORT INFORMATION

DIMETHYL ETHER

14.1 Transport by road (ADR 2009):
Transport by rail (RID 2009):

Class: 2 Packaging group: - UN 1033

Classification code: 2F
Tunnel restriction code: (B/D)
Transport category:

Transport document: Consignment paper.
Instructions in writing: ADR 5.4.3.4



14.2 Transport by sea (IMDG 34-08):

Class: 2.1 Packaging group: - UN 1033

Emergency Sheet (EmS): F-D,S-U
First Aid Guide (MFAG):
Marine pollutant: No.
Transport document: Shipping Bill of lading.



14.3 Transport by air (ICAO/IATA 2009):

Class: 2.1 Packaging group: - UN 1033

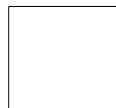
Transport document: Air Bill of lading.



15. REGULATORY INFORMATION

15.1 EC Labelling:

F+



This product is labelled as EXTREMELY FLAMMABLE in accordance with Directive 67/548/EEC-2009/2/EC

- R-phrases:

R12 Extremely flammable.
R18 In use, may form flammable/explosive vapour-air mixture.

- S-phrases:

S2 Keep out of reach of children.
S16 Keep away from sources of ignition - No smoking.

- Supplementary statements:

P96 Pressurised container. Protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use.
P97 Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of reach of children.

- Dangerous ingredients: None in a percentage equal to or higher than the limit for the name.

15.2 Restrictions on manufacture, placing on market and use, according to Annex XVI of Regulation (EC) No. 1907/2006:

Restricted to professional users. For professional users only. 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.

15.3 Other EC regulations:

- It is applicable the Directive 75/324/EEC-2008/47/EC, relating to aerosol dispensers and the Directive 87/404/EEC, concerning simple pressure packages.

15.4 Other regulations:

Not available



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16. OTHER INFORMATION

Text of R-phrases listed in sections 2 and 3:

R12 Extremely flammable.

Material Safety Data Sheet regulations:

Material Safety Data Sheet in accordance with Annex II of Regulation (EC) No. 1907/2006 (REACH).

Main data sources:

- European Chemicals Bureau: Existing Chemicals, <http://ecb.jrc.ec.europa.eu/esis/>
- Industrial Solvents Handbook, Ibert Mellan (Noyes Data Co., 1970).
- Threshold Limit Values, (AGCIH, 2008).
- European agreement on the international carriage of dangerous goods by road, (ADR 2009).
- International Maritime Dangerous Goods Code IMDG including Amendment 34-08 (IMO, 2008).

History:

Version:

1

Revision date:

30/11/2010

Printing date:

30/03/2012

The information of this Material Safety Data Sheet, is based on the present state of knowledge and on current UE and national laws, as the users' working conditions are beyond our knowledge and control. The product is not to be used for other purposes than those specified, without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfil the demand laid down in the local rules and legislation. The information in this Material Safety Data Sheet is meant as a description of the safety requirements of the product and it is not to be considered as a guarantee of the product's properties.