

Safety data sheet

According to 1907/2006 EEC Article 31

Printing date: 20.04.2011

Version: 15

Revision: 20.04.2011

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

- **Product identifier**
- **Trade name:** JLM Airco Cleaner
- **Article number:** J04500
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Surface cleaning
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
GMS Lubricants B.V.
Walruskoog 3-5
NL-1822 BC Alkmaar
The Netherlands
Tel: +31 (0)72 - 5616464
E-mail: ihumphreys@gms.nl
- **Further information obtainable from:** Research & Development / E-mail: ihumphreys@gms.nl
- **Emergency telephone number:** During normal opening hours: Tel: +31 (0)72 - 5616464

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



F+; Extremely flammable

R12: Extremely flammable.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



F+ Extremely flammable

- **Risk phrases:**

12 Extremely flammable.

- **Safety phrases:**

2 Keep out of the reach of children.

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- 16 Keep away from sources of ignition - No smoking.
- 23 Do not breathe fumes/aerosol.
- 46 If swallowed, seek medical advice immediately and show this container or label.
- 51 Use only in well-ventilated areas.

- **Special labelling of certain preparations:**

Contains Amyl cinnamal. May produce an allergic reaction.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Buildup of explosive mixtures possible without sufficient ventilation.

- **Classification in accordance with Directive 75/324/EEC: Extremely flammable**

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Active substance with propellant

- **Dangerous components:**

CAS: 106-97-8 EINECS: 203-448-7	butane (containing < 0.1% butadiene (203-450-8)) F+ R12 Flam. Gas 1, H220; Press. Gas, H280	2.5-<10%
CAS: 107-98-2 EINECS: 203-539-1	1-methoxy-2-propanol R10-67 Flam. Liq. 3, H226; STOT SE 3, H336	2.5-<10%
CAS: 74-98-6 EINECS: 200-827-9	propane F+ R12 Flam. Gas 1, H220; Press. Gas, H280	1.0-<2.5%
CAS: 7320-34-5 EINECS: 230-785-7	tetrapotassium pyrophosphate Xi R36 Eye Irrit. 2, H319	1.0-<2.5%
CAS: 9002-92-0	Laureth-8 Xi R38-41 Eye Dam. 1, H318; Skin Irrit. 2, H315	1.0-<2.5%
CAS: 1336-21-6 EINECS: 215-647-6	ammonia C R34; N R50 Skin Corr. 1B, H314; Aquatic Acute 1, H400	0.1-<1.0%

- **Ingredients according to detergents guideline 648/2004/EC**

aliphatic hydrocarbons	5 - 15%
phosphates, non-ionic surfactants, anionic surfactants, AMYL CINNAMAL	< 5%

4 First aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:** Rinse opened eye for several minutes under running water.

- **After swallowing:** Do not induce vomiting; call for medical help immediately.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
Water haze
Fire-extinguishing powder
Carbon dioxide
Alcohol resistant foam
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:**
Do not spray onto a naked flame or any incandescent material.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:**
Observe official regulations on storing packagings with pressurized containers.
- **Further information about storage conditions:**
Keep receptacle tightly sealed.
Do not seal receptacle gas tight.
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
- **Specific end use(s)** No further relevant information available.

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8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

106-97-8 butane (containing < 0.1% butadiene (203-450-8))

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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107-98-2 1-methoxy-2-propanol

WEL	Short-term value: 560 mg/m ³ , 150 ppm Long-term value: 375 mg/m ³ , 100 ppm Sk
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74-98-6 propane

WEL	Short-term value: 3600 mg/m ³ , 2000 ppm Long-term value: 1800 mg/m ³ , 1000 ppm
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· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Use suitable respiratory protective device in case of insufficient ventilation.

Filter AX/P2

· **Protection of hands:**

Solvent resistant gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves** Nitrile rubber, NBR

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Use protective suit.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Aerosol

Colour: According to product specification

· **Odour:** Characteristic

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

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· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	0°C
· Flash point:	-60°C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	365°C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapour pressure at 20°C:	4 Bar
· Density at 20°C:	0.97 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· Segregation coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	12.1 %
Water:	82.6 %
Solids content:	2.5 %
· Other information	No further relevant information available.

* 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

9002-92-0 Laureth-8

Oral	LD50	8600 mg/kg (rat)
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

* 12 Ecological information

- **Toxicity**

- **Acquatic toxicity:**

7320-34-5 tetrapotassium pyrophosphate

LC50	>750 mg/l (Fish (Golden Orfe))
	>750 mg/l (Fish (leuciscus idus, 48hr))

- **Persistence and degradability** Easily biodegradable
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

* 14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 2 5F Gases.
- **Danger code (Kemler):** -
- **UN-Number:** 1950
- **Packaging group:** -
- **Hazard label** 2.1
- **UN proper shipping name:** 1950 AEROSOLS
- **Limited quantities (LQ)** 1L
- **Transport category** 2

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· **Tunnel restriction code** D· **Maritime transport IMDG:**

· **IMDG Class:** 2.1
 · **UN Number:** 1950
 · **Label** 2.1
 · **Packaging group:** -
 · **EMS Number:** F-D,S-U
 · **Marine pollutant:** No
 · **Proper shipping name:** AEROSOLS

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** 2.1
 · **UN/ID Number:** 1950
 · **Label** 2.1
 · **Packaging group:** -
 · **Proper shipping name:** AEROSOLS, flammable

· **UN "Model Regulation":** UN1950, AEROSOLS, 2.1
 · **Special precautions for user** Warning: Gases.
 · **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

* 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**· **National regulations:**· **Technical instructions (air):**

Class	Share in %
Wasser	50-100
NK	10-<25

· **VOC-CH** 11.80 %
 · **VOC-EU** 589.0 g/l
 · **Danish MAL Code** 4-3
 · **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

* 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H220 Extremely flammable gas.
 H226 Flammable liquid and vapour.
 H280 Contains gas under pressure; may explode if heated.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.

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H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

R10 Flammable.

R12 Extremely flammable.

R34 Causes burns.

R36 Irritating to eyes.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

R50 Very toxic to aquatic organisms.

R67 Vapours may cause drowsiness and dizziness.

- **Department issuing MSDS:** Research & Development

- **Contact:** Ian Humphreys

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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