



Safety data sheet
according to 1907/2006/EC, Article 31

Printing date: 11.11.2010

Version: 1

Revision: 11.11.2010

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

- **Product identifier**
- **Trade name:** **422B - 340G aerosol Silicone conformal coating**
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation:** Surface coating
- **Details of the supplier of the safety data sheet**

• **Manufacturer:**
MG Chemicals
1210 Corporate Drive,
Burlington, Ontario L7L 5R6
CANADA

PHONE: +1 905-331-1396
E-MAIL: support@mgchemicals.com
WEB www.mgchemicals.com
FAX +1 905-340-0772

• **Distributor:**
MG Chemicals UK Limited
DMC, Ensor House, Ensor Way,
New Mills, High Peak, SK22 4NQ,
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PHONE: +44 1663 362888
E-MAIL: sales@mgchemicals.com

• **Information department:**
E-MAIL (Competent Person): sds@mgchemicals.com

- For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
UK: Call CHEMTREC: +(44)-870-8200418 or international: +(1) 703-527-3887

For updates on this SDS please download from www.mgchemicals.com

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

Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

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



Xn; Harmful

R20/21: Harmful by inhalation and in contact with skin.



Xi; Irritant

R36/38: Irritating to eyes and skin.

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F+; Extremely flammable

R12: Extremely flammable.

R67: Vapours may cause drowsiness and dizziness.

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 EC" in the latest valid version.

Warning! Pressurized container.

Classification system:

The classification was made according to the latest editions of the EC-lists and expanded using company data and specialized literature.

Label elements
Labelling according to EU guidelines:

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

Code letter and hazard designation of product:


Xn Harmful

F+ Extremely flammable

Hazard-determining components of labelling:

xylene, mixed isomers, pure

Risk phrases:

12 Extremely flammable.

20/21 Harmful by inhalation and in contact with skin.

36/38 Irritating to eyes and skin.

67 Vapours may cause drowsiness and dizziness.

Safety phrases:

16 Keep away from sources of ignition - No smoking.

23 Do not breathe aerosol.

36/37 Wear suitable protective clothing and gloves.

51 Use only in well-ventilated areas.

60 This material and its container must be disposed of as hazardous waste.

Special labelling of certain preparations:

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:** Mixture of the substances listed below with nonhazardous additions.

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










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· Dangerous components:

CAS: 115-10-6	dimethyl ether	25-50%
EINECS: 204-065-8	 F+ R12	
Index number: 603-019-00-8	 Flam. Gas 1, H220;  Press. Gas, H280	
CAS: 67-64-1	acetone	20-25%
EINECS: 200-662-2	 Xi R36;  F R11	
Index number: 606-001-00-8	R66-67  Flam. Liq. 2, H225;  Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 1330-20-7	xylene, mixed isomers, pure	10-20%
EINECS: 215-535-7	 Xn R20/21;  Xi R38	
Index number: 601-022-00-9	R10  Flam. Liq. 3, H226;  Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315	
CAS: 78-93-3	butanone	10-20%
EINECS: 201-159-0	 Xi R36;  F R11	
Index number: 606-002-00-3	R66-67  Flam. Liq. 2, H225;  Eye Irrit. 2, H319; STOT SE 3, H336	
CAS: 100-41-4	ethylbenzene	< 2.5%
EINECS: 202-849-4	 Xn R20;  F R11	
Index number: 601-023-00-4	 Flam. Liq. 2, H225;  Acute Tox. 4, H332	

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First aid measures

· Description of first aid measures
· General information:

Symptoms of poisoning may occur even after several hours; therefore medical observation is suggested for at least 48 hours after the accident.

Remove affected persons from danger area and lay them down.

Immediately remove any clothing soiled by the product.

· After inhalation:

Supply fresh air or oxygen; call a doctor.

In case of unconsciousness, place patients on their side in a stable position for transportation.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact: Rinse the eyes with open eyelids for 10 - 15 minutes with water. Then consult a doctor (eye specialist).

· After swallowing:

Do not induce vomiting.

Drink 2-4 glasses of water.

Seek medical treatment.

· Information for doctor:
· Most important symptoms and effects, both acute and delayed

After skin contact:

Redness of the skin

After inhalation:

Nausea

Vomiting

Gastric or intestinal disorders.

Central nervous depression

· Indication of any immediate medical attention and special treatment needed Symptomatic treatment

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5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** Direct jet water
- **Special hazards arising from the substance or mixture**
Vapours spread on the ground to a distant ignition source and flash back.
Dangerous decomposition products see chapter 10: stability and reactivity
- **Advice for firefighters**
- **Protective equipment:**
Do not inhale combustion vapours.
Wear self-contained respiratory protective device.
- **Additional information:**
Heating leads to pressure increase entailing danger of bursting and explosion. Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

Do not smoke - keep ignition sources away

Ensure adequate ventilation.

Use respiratory protective device against the effects of fumes/dust/aerosol.

Avoid contact with eyes and skin.

- **Environmental precautions:**

Prevent seepage into sewage system, workpits and cellars.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to penetrate the ground/soil.

In case of seepage into the ground inform responsible authorities.

- **Methods and material for containment and cleaning up:**

Ensure adequate ventilation.

Make sure to recycle or dispose of in suitable receptacles.

Absorb with non-combustible material like sand, soil or diatomite.

Dispose contaminated material as waste according to item 13.

Wash spill area with soap and water.

- **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.
Avoid contact with eyes and skin.

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Information about protection against explosions and fires:


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.

Do not spray on flames or any incandescent material.

Observe the general rules of industrial fire protection.

Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:

Store cool and dry in a well ventilated area.

Observe official regulations on storing packagings with pressurized containers.

Pay attention to special rules for the storage of flammable liquids.

not appropriated container material

Aluminium

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from feed.

Store away from oxidizing agents.

Do not store together with acids.

Do not store together with alkalies (caustic solutions).

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.

Protect from frost.

Storage class: 2B pressurized gas containers

Specific end use(s) Do not inhale fumes/aerosol.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters
Components with limit values that require monitoring at the workplace:
115-10-6 dimethyl ether
IOELV (European Union) Long-term value: 1920 mg/m³, 1000 ppmWEL (Great Britain) Short-term value: 958 mg/m³, 500 ppmLong-term value: 766 mg/m³, 400 ppmOEL (Ireland) Long-term value: 1920 mg/m³, 1000 ppm

IOELV

67-64-1 acetone
IOELV (European Union) Long-term value: 1210 mg/m³, 500 ppmWEL (Great Britain) Short-term value: 3620 mg/m³, 1500 ppmLong-term value: 1210 mg/m³, 500 ppmOEL (Ireland) Long-term value: 1210 mg/m³, 500 ppm

IOELV

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1330-20-7 xylene, mixed isomers, pure

IOELV (European Union)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Skin
WEL (Great Britain)	Short-term value: 441 mg/m ³ , 100 ppm Long-term value: 220 mg/m ³ , 50 ppm Sk; BMGV
OEL (Ireland)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Sk, IOELV

78-93-3 butanone

IOELV (European Union)	Short-term value: 900 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm
WEL (Great Britain)	Short-term value: 899 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm Sk
OEL (Ireland)	Short-term value: 900 mg/m ³ , 300 ppm Long-term value: 600 mg/m ³ , 200 ppm Sk, IOELV

100-41-4 ethylbenzene

IOELV (European Union)	Short-term value: 884 mg/m ³ , 200 ppm Long-term value: 442 mg/m ³ , 100 ppm Skin
WEL (Great Britain)	Short-term value: 552 mg/m ³ , 125 ppm Long-term value: 441 mg/m ³ , 100 ppm
OEL (Ireland)	Short-term value: 545 mg/m ³ , 125 ppm Long-term value: 435 mg/m ³ , 100 ppm Sk, IOELV

• **Additional information:** The lists that were valid during the creation were used as basis.

• **Exposure controls**

• **Personal protective equipment:**

• **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Use skin protection cream for skin protection.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.
Provide eye bath.
If larger quantities are handled, provide emergency showers.

• **Breathing equipment:**

In case of unintentional release of substance, exceeding the occupational exposure limit value:
Short term filter device:
Filter A

• **Protection of hands:**

Chemical resistant gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

• **Material of gloves:**

The selection of suitable depends upon the material, and also upon the quality of the gloves. The degree of protection will vary from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

• **Penetration time of glove material:**

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

• **Eye protection:** Tightly sealed goggles.

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- **Body protection:** Protective work clothing.
-

9 Physical and chemical properties

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

- **General Information:**

- **Appearance:**

Form:	Aerosol
Colour:	Clear
Odour:	Ether-like

- **pH-value:** 7

- **Change in condition:**

Melting point/Melting range:	not determined
Boiling point/Boiling range:	55°C

- **Flash point:** -18°C

- **Ignition temperature:** 432°C

- **Self ignition temperature:** Autoignition temperature:
272°C

- **Danger of explosion:** Aerosol.
Pressurized container.
Do not pierce.

- **Explosion limits:**

Lower:	0.8 Vol %
Upper:	13.1 Vol %

- **Vapour pressure at 21°C:** 40 PSI

- **Density:** 0.9 g/cm³

- **Solubility in / Miscibility with Water:** Insoluble

- **Viscosity:**
dynamic at 23°C: 13 mPas (Brookfield 100 rpm)

10 Stability and reactivity

- **Reactivity**

- **Chemical stability**

- **Thermal decomposition / conditions to be avoided:**

Avoid temperatures >50°C.

No decomposition if used and stored according to specifications.

- **Possibility of hazardous reactions** Violent reactions with above-mentioned substances.

- **Incompatible materials:**

Strong acids
Strong bases
Strong oxidants
Sodium
Barium
Aluminium

- **Hazardous decomposition products:**

In case of fire or at high temperatures the formation of following decomposition products is possible.

dimethylcyclsiloxanes
methylphenylcyclsiloxanes

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Carbon monoxide and carbon dioxide
 Halogens
 Halogen acids
 carbonyl halides
 At temperatures over 160°C formaldehyde

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

1330-20-7 xylene, mixed isomers, pure

Oral LD₅₀ 4300 mg/kg (rat)
 Dermal LD₅₀ 2000 mg/kg (rabbit)
 Inhalative LC₅₀/4 h 6350 mg/l (rat)

115-10-6 dimethyl ether

Inhalative LC₅₀/4 h 308 mg/l (rat)

67-64-1 acetone

Oral LD₅₀ > 2000 mg/kg (rat)
 Dermal LD₅₀ > 15800 mg/kg (rabbit)
 Inhalative LC₅₀/4 h 76 mg/l (rat)
 TLo 30000 mg/m³ (mouse)
 2h

78-93-3 butanone

Oral LD₅₀ 2737 mg/kg (rat)
 Dermal LD₅₀ 5000 mg/kg (rabbit)
 Inhalative LC₅₀ > 5000 ppm (rat)
 6h

100-41-4 ethylbenzene

Oral LD₅₀ 3500 mg/kg (rat)
 Dermal LD₅₀ 17800 mg/kg (rabbit)

· Primary irritant effect:

· on the skin:

Irritant to skin and mucous membranes.
 Continuing or repeated contact with the skin may cause dermatitis.

· on the eye: Irritating effect.

· Sensitization: No sensitizing effects known.

· Other information (about experimental toxicology):

· Carcinogenic, mutagenic effects and adverse effects on reproduction:

One component is suspected to have carcinogenic effects.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:

Harmful

Irritant

After swallowing: irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

12 Ecological information

· Toxicity

· Aquatic toxicity:

67-64-1 acetone

LC₅₀/48h 12600 mg/l (DM)
 7500 mg/l (go)

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LC₅₀/96h 6500 mg/l (rainbow trout)**78-93-3 butanone**EC₀ 1150 mg/l (Pimephales sp.)EC₅₀/48h 5091 mg/l (daphnia magna)LC₅₀/96h 4600 mg/l (leuciscus idus)

3220 mg/l (Pimephales promelas)

NOEC < 70 mg/l (daphnia magna)

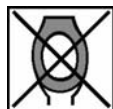
100-41-4 ethylbenzeneEC₅₀/48h 50-120 mg/l (daphnia magna)EC₅₀/96h 44 mg/l (leuciscus idus)

12.1 mg/l (Pimephales promelas)

IC₅₀/72h 438 mg/l (algae)• **Persistence and degradability**• **Other information:** The product has not been tested.• **Additional ecological information:**• **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous to water.

According to appendix 4 of VwVwS dated 27.7.2005 (German regulation)



Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water even if small quantities leak into the ground.

• **Results of PBT and vPvB assessment**• **PBT:** Not applicable.• **vPvB:** Not applicable.

13 Disposal considerations

• **Waste treatment methods**• **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal according to instructions of local authorities.

• **Uncleaned packagings:**• **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:** -• **Label:** 2.1• **UN proper shipping name:** 1950 AEROSOLS

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- **Limited quantities (LQ):** LQ2
- **Transport category:** 2
- **Tunnel restriction code:** D
- **Remarks:** Limited Quantity: 1 l inner packing, 30 l packing unit
- **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
 - **Remarks:**
 - Packing Instructions:
 - For Limited Quantities: Y203(Max Net Qty/Pkg: 30 kg G)
 - Passenger and Cargo Aircraft: 203 (Max Net Qty/Pkg: 75 kg)
 - Cargo Aircraft only: 203 (Max Net Qty/Pkg: 150 kg)
 - **UN "Model Regulation":** UN1950, DRUCKGASPACKUNGEN, 2.1
 - **Special precautions for user** Warning: Gases.
 - **Transport/Additional information:** Protect from heat!
-

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **National regulations**
 - **Technical guidance (air):**
 - **Class Share in %:**
 - **NK** 91.5
 - **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.
 - **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.
- H225 Highly flammable liquid and vapour.

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H226 Flammable liquid and vapour.
 H280 Contains gas under pressure; may explode if heated.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H336 May cause drowsiness or dizziness.

R10 Flammable.
 R11 Highly flammable.
 R12 Extremely flammable.
 R20 Harmful by inhalation.
 R20/21 Harmful by inhalation and in contact with skin.
 R36 Irritating to eyes.
 R38 Irritating to skin.
 R66 Repeated exposure may cause skin dryness or cracking.
 R67 Vapours may cause drowsiness and dizziness.

• **Department issuing MSDS:**

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• **Contact:** Dr. Sonja Fischer

• **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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

• **Sources:**

EPA (Environmental Protection Agency/USA)

MSDS of the manufacturer
