Printing date 16.01.2019 Revision: 16.01.2019

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

· 1.1 Product identifier

· Trade name: Methylal · Article number: 5452

• CAS Number: 545 109-87-5

EC number: 203-714-2

· 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

Application of the substance / the mixture Solvents

- · 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

Suter Kunststoffe AG Aefligenstrasse 3 CH-3312 Fraubrunnen

Tel. +41 31 763 60 60 Fax +41 31 763 60 61

· Further information obtainable from:

Sales Team

info@swiss-composite.ch

· 1.4 Emergency telephone number:

Tox Info Suisse

24-h-Emergency nummber: 145 (from abroad: +41 44 251 51 51)

Information: +41 44 251 66 66

SECTION 2: Hazards identification

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



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

· Hazard pictograms



- · Signal word Danger
- · Hazard statements

H225 Highly flammable liquid and vapour.

(Contd. on page 2)

Printing date 16.01.2019 Revision: 16.01.2019

Trade name: Methylal

(Contd. of page 1)

· Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting equipment.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/shower.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable. · **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

· 3.1 Chemical characterisation: Substances

· CAS No. Description

109-87-5 dimethoxymethane

· Identification number(s)

· EC number: 203-714-2

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

- · 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

SECTION 6: Accidental release measures

• 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

(Contd. on page 3)

(Contd. of page 2)

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

Printing date 16.01.2019 Revision: 16.01.2019

Trade name: Methylal

Ensure adequate ventilation.

• 6.4 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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling No special precautions are necessary if used correctly.
- · Information about fire and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

109-87-5 dimethoxymethane

MAK (Switzerland) | Short-term value: 6200 mg/m³, 2000 ppm | Long-term value: 3100 mg/m³, 1000 ppm

SSc;

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- Protection of hands:

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 the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

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.

(Contd. on page 4)

Printing date 16.01.2019 Revision: 16.01.2019

Trade name: Methylal

· Eye protection:

(Contd. of page 3)



Tightly sealed goggles

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

· pH-value:

Form: Fluid
Colour: Colourless
Odour: Characteristic
Odour threshold: Not determined.

Change in condition

Melting point/freezing point: -104,8 °C Initial boiling point and boiling range: 42,3 °C

· Flash point: -30,5 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 260 °C

Decomposition temperature: Not determined.

· Auto-ignition temperature: Not determined.

• Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Not determined.

· Explosion limits:

 Lower:
 2,2 Vol %

 Upper:
 19,9 Vol %

· Vapour pressure at 20 °C: 440 hPa

Density at 20 °C: 0,859 g/cm³
 Relative density Not determined.
 Vapour density Not determined.
 Evaporation rate Not determined.

· Solubility in / Miscibility with

water at 20 °C: 330 g/l

· Partition coefficient: n-octanol/water: Not determined.

· Viscosity:

Kinematic at 20 °C: 0,371 mm²/s

· Solvent content:

VOC (EC) 0,00 %

Solids content: 0,0 %

• 9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant information available.

(Contd. on page 5)

Printing date 16.01.2019 Revision: 16.01.2019

Trade name: Methylal

(Contd. of page 4)

- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

109-87-5 dimethoxymethane

Oral LD50 6.423 mg/kg (rat)
Dermal LD50 >5.000 mg/kg (rabbit)

- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/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.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · **vPvB:** Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 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.

(Contd. on page 6)

Printing date 16.01.2019 Revision: 16.01.2019

Trade name: Methylal

(Contd. of page 5)

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

	tion
14.1 UN-Number ADR, IMDG, IATA	UN1234
14.2 UN proper shipping name ADR IMDG, IATA	UN1234 METHYLAL METHYLAL
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
Class	3 Flammable liquids.
Label	3
14.4 Packing group ADR, IMDG, IATA	II
14.5 Environmental hazards: Marine pollutant:	No
14.6 Special precautions for user Danger code (Kemler): EMS Number: Stowage Category	Warning: Flammable liquids. 33 F-E,S-D E
14.7 Transport in bulk according to Ani of Marpol and the IBC Code	nex II Not applicable.
Transport/Additional information:	
ADR Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 m
Transport category Tunnel restriction code	2 D/E
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 m
UN "Model Regulation":	UN 1234 METHYLAL, 3, II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · Seveso category P5c FLAMMABLE LIQUIDS
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 5.000 t

(Contd. on page 7)

Printing date 16.01.2019 Revision: 16.01.2019

Trade name: Methylal

(Contd. of page 6)

- · Qualifying quantity (tonnes) for the application of upper-tier requirements 50.000 t
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

- · Department issuing SDS: Abteilung Labor
- · Contact: Laborleiter Winoil AG
- · 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)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids – Category 2

CH/