

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: **3154**

Version: **3.1 en**

Replaces version of: 2024-03-02

Version: (3)

date of compilation: 2019-08-29

Revision: 2024-09-18

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

### 1.1 Product identifier

|                                 |   |
|---------------------------------|---|
| Identification of the substance | <b>Methylal SOLVAGREEN® ≥99,9 % for synthesis</b> |
| Article number                  | 3154  |
| EC number                       | 203-714-2   |
| CAS number                      | 109-87-5  |

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

|                           |   |
|---------------------------|---|
| Relevant identified uses: | Laboratory chemical<br>Laboratory and analytical use                                  |
| Uses advised against:     | Do not use for private purposes (household).<br>Food, drink and animal feedingstuffs. |

### 1.3 Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG  
Schoemperlenstr. 3-5  
D-76185 Karlsruhe  
Germany

**Telephone:** +49 (0) 721 - 56 06 0

**Telefax:** +49 (0) 721 - 56 06 149

**e-mail:** [sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)

**Website:** [www.carlroth.de](http://www.carlroth.de)

Competent person responsible for the safety data sheet: Department Health, Safety and Environment

**e-mail (competent person):** [sicherheit@carlroth.de](mailto:sicherheit@carlroth.de)

### 1.4 Emergency telephone number

| Name  | Street    | Postal code/city     | Telephone    | Website |
|---|-----------|----------------------|--------------|---------|
| National Poisons Information Service<br>City Hospital | Dudley Rd | B187QH<br>Birmingham | 844 892 0111 |         |

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification acc. to GHS

| Section | Hazard class     | Category | Hazard class and category | Hazard statement |
|---------|------------------|----------|---------------------------|------------------|
| 2.6     | Flammable liquid | 2        | Flam. Liq. 2              | H225             |

For full text of abbreviations: see SECTION 16

#### The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



**Methylal SOLVAGREEN® ≥99,9 % for synthesis**

article number: **3154**

## 2.2 Label elements

### Labelling

#### Signal word

**Danger**

#### Pictograms

GHS02



#### Hazard statements

H225 Highly flammable liquid and vapour

#### Precautionary statements

##### **Precautionary statements - prevention**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P280 Wear protective gloves/eye protection

##### **Precautionary statements - response**

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

##### **Precautionary statements - storage**

P403+P235 Store in a well-ventilated place. Keep cool

## 2.3 Other hazards

### **Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                   |              |
|-------------------|--------------|
| Name of substance | Methylal     |
| Molecular formula | $C_3H_8O_2$  |
| Molar mass        | 76,1 $g/mol$ |
| CAS No            | 109-87-5     |
| EC No             | 203-714-2    |

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### General notes

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

### 4.2 Most important symptoms and effects, both acute and delayed

Irritant effects, Gastrointestinal complaints, Diarrhoea, Vomiting, Cough, Dyspnoea, Dizziness, Headache, Nausea

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

none

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings!  
water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

### 5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours may form explosive mixtures with air.

#### Hazardous combustion products

In case of fire may be liberated: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures



#### For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains.

#### Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Provision of sufficient ventilation. Use extractor hood (laboratory).

#### Measures to prevent fire as well as aerosol and dust generation



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge. Due to danger of explosion, prevent leakage

of vapours into cellars, flues and ditches.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed.

#### Incompatible substances or mixtures

Observe hints for combined storage. Incompatible materials: see section 10. Keep/store away from oxidizing substances.

#### Consideration of other advice:

Ground/bond container and receiving equipment.

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

### Ventilation requirements

Use local and general ventilation.

### Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### National limit values

#### Occupational exposure limit values (Workplace Exposure Limits)

| Country | Name of agent    | CAS No   | Identifier | TWA [ppm] | TWA [mg/m <sup>3</sup> ] | STEL [ppm] | STEL [mg/m <sup>3</sup> ] | Ceiling-C [ppm] | Ceiling-C [mg/m <sup>3</sup> ] | Notation | Source    |
|---------|------------------|----------|------------|-----------|--------------------------|------------|---------------------------|-----------------|--------------------------------|----------|-----------|
| GB      | dimethoxymethane | 109-87-5 | WEL        | 1.000     | 3.160                    | 1.250      | 3.950                     |                 |                                |          | EH40/2005 |

#### Notation

Ceiling-C

Ceiling value is a limit value above which exposure should not occur

STEL

Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA

Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

#### Human health values

| Relevant DNELs and other threshold levels |                         |                                    |                   |                            |
|---|-------------------------|------------------------------------|-------------------|----------------------------|
| Endpoint                                  | Threshold level         | Protection goal, route of exposure | Used in           | Exposure time              |
| DNEL                                      | 126,6 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry) | chronic - systemic effects |
| DNEL                                      | 17,9 mg/kg bw/day       | human, dermal                      | worker (industry) | chronic - systemic effects |

#### Environmental values

| Relevant PNECs and other threshold levels |                 |                       |                              |                              |
|---|-----------------|-----------------------|------------------------------|------------------------------|
| End-point                                 | Threshold level | Organism              | Environmental compartment    | Exposure time                |
| PNEC                                      | 14,58 mg/l      | aquatic organisms     | freshwater                   | short-term (single instance) |
| PNEC                                      | 1,477 mg/l      | aquatic organisms     | marine water                 | short-term (single instance) |
| PNEC                                      | 10 g/l          | aquatic organisms     | sewage treatment plant (STP) | short-term (single instance) |
| PNEC                                      | 13,14 mg/kg     | aquatic organisms     | freshwater sediment          | short-term (single instance) |
| PNEC                                      | 4,654 mg/kg     | terrestrial organisms | soil                         | short-term (single instance) |

## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

### 8.2 Exposure controls

#### Individual protection measures (personal protective equipment)

##### Eye/face protection



Use safety goggle with side protection.

##### Skin protection



##### • hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a considerable reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as a guide.

##### • type of material

PVC: polyvinyl chloride

##### • material thickness

1,2 mm

##### • breakthrough times of the glove material

>60 minutes (permeation: level 3)

##### • Splash protection - Protective gloves

• type of material: Butyl caoutchouc (butyl rubber)

• material thickness: 0,5 mm

##### • other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Flame-retardant protective clothing.

##### Respiratory protection



Respiratory protection necessary at: Aerosol or mist formation. Type: AX (gas filters and combined filters against low-boiling point organic compounds, colour code: Brown).

##### Environmental exposure controls

Keep away from drains, surface and ground water.

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



**Methylal SOLVAGREEN® ≥99,9 % for synthesis**

article number: **3154**

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

|  |  |
|--|--|
| Physical state   | liquid   |
| Colour   | colourless                                       |
| Odour  | pungent - like chloroform                        |
| Melting point/freezing point                             | -104,8 °C at 1.013 hPa (ECHA)                    |
| Boiling point or initial boiling point and boiling range | 45,5 °C  |
| Flammability   | flammable liquid in accordance with GHS criteria |
| Lower and upper explosion limit                          | 2,2 vol% (LEL) - 19,9 vol% (UEL)                 |
| Flash point  | -30,5 °C at 1.013 hPa (ECHA)                     |
| Auto-ignition temperature                                | 260 °C at 1.013 hPa (ECHA)                       |
| Decomposition temperature                                | not relevant                                     |
| pH (value)   | not determined                                   |
| Kinematic viscosity                                      | 0,371 mm <sup>2</sup> /s                         |
| Dynamic viscosity  | 0,325 mPa s at 20 °C                             |

#### Solubility(ies)

Water solubility 323 g/l at 16 °C (ECHA)

#### Partition coefficient

Partition coefficient n-octanol/water (log value): 0 (ECHA)  
Soil organic carbon/water (log KOC) 0,744 (ECHA)

Vapour pressure 40 kPa at 20 °C

#### Density and/or relative density

Density 0,8593 g/cm<sup>3</sup>  
Relative vapour density 2,63 (air = 1)

Particle characteristics not relevant (liquid)

#### Other safety parameters

Oxidising properties none

### 9.2 Other information

Information with regard to physical hazard classes: There is no additional information.

Other safety characteristics:

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

|                  |                           |
|------------------|---------------------------|
| Surface tension  | 21,2 mN/m (20 °C), (ECHA) |
| Refractive index | 1,354                     |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

It's a reactive substance. Risk of ignition. Vapours may form explosive mixtures with air.

#### If heated

Risk of ignition.

#### If exposed to air

Danger of explosion.

### 10.2 Chemical stability

Reactivity if exposed to air.

### 10.3 Possibility of hazardous reactions

Violent reaction with: Acid chlorides, inorganic. Strong oxidiser. Strong alkali. Strong acid.

### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5 Incompatible materials

different plastics

### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5. Peroxides.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Classification acc. to GHS

#### Acute toxicity

Shall not be classified as acutely toxic.

| Acute toxicity |          |              |         |        |        |
|----------------|----------|--------------|---------|--------|--------|
| Exposure route | Endpoint | Value        | Species | Method | Source |
| oral           | LD50     | 6.423 mg/kg  | rat     |        | ECHA   |
| dermal         | LD50     | >5.000 mg/kg | rabbit  |        | ECHA   |

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

#### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

#### Carcinogenicity

Shall not be classified as carcinogenic.

#### Reproductive toxicity

Shall not be classified as a reproductive toxicant.



# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### Symptoms related to the physical, chemical and toxicological characteristics

#### • If swallowed

diarrhoea, vomiting, gastrointestinal complaints

#### • If in eyes

causes slight to moderate irritation

#### • If inhaled

nausea, dizziness, cough, headache, Dyspnoea

#### • If on skin

has degreasing effect on the skin, repeated exposure may cause skin dryness or cracking

#### • Other information

none

### 11.2 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### 11.3 Information on other hazards

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

| Aquatic toxicity (acute) |                       |         |        |               |
|--------------------------|-----------------------|---------|--------|---------------|
| Endpoint                 | Value                 | Species | Source | Exposure time |
| LC50                     | $>1.000 \text{ mg/l}$ | fish    | ECHA   | 96 h          |
| EC50                     | $>1.000 \text{ mg/l}$ | fish    | ECHA   | 96 h          |

| Aquatic toxicity (chronic) |                      |         |        |               |
|----------------------------|----------------------|---------|--------|---------------|
| Endpoint                   | Value                | Species | Source | Exposure time |
| NOEC                       | $450,3 \text{ mg/l}$ | fish    | ECHA   | 30 d          |

### 12.2 Persistence and degradability

Theoretical Oxygen Demand:  $1,682 \text{ mg/mg}$   
Theoretical Carbon Dioxide:  $1,735 \text{ mg/mg}$

### 12.3 Bioaccumulative potential

Does not significantly accumulate in organisms.

|                           |          |
|---------------------------|----------|
| n-octanol/water (log KOW) | 0 (ECHA) |
|---------------------------|----------|

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

|     |            |
|-----|------------|
| BCF | 0,6 (ECHA) |
|-----|------------|

### 12.4 Mobility in soil

|  |              |
|--|--------------|
| The Organic Carbon normalised adsorption coefficient | 0,744 (ECHA) |
|--|--------------|

### 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\geq 0,1\%$ .

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

HP 3 flammable

### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number or ID number

|           |         |
|-----------|---------|
| ADRRID    | UN 1234 |
| IMDG-Code | UN 1234 |
| ICAO-TI   | UN 1234 |

### 14.2 UN proper shipping name

|           |          |
|-----------|----------|
| ADRRID    | METHYLAL |
| IMDG-Code | METHYLAL |
| ICAO-TI   | Methylal |

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

### 14.3 Transport hazard class(es)

|           |   |
|-----------|---|
| ADRRID    | 3 |
| IMDG-Code | 3 |
| ICAO-TI   | 3 |

### 14.4 Packing group

|           |    |
|-----------|----|
| ADRRID    | II |
| IMDG-Code | II |
| ICAO-TI   | II |

### 14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

### 14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

### 14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

### 14.8 Information for each of the UN Model Regulations

#### Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

|                                       |                                |
|---------------------------------------|--------------------------------|
| Proper shipping name                  | METHYLAL                       |
| Particulars in the transport document | UN1234, METHYLAL, 3, II, (D/E) |
| Classification code                   | F1                             |
| Danger label(s)                       | 3                              |



|                               |     |
|-------------------------------|-----|
| Excepted quantities (EQ)      | E2  |
| Limited quantities (LQ)       | 1 L |
| Transport category (TC)       | 2   |
| Tunnel restriction code (TRC) | D/E |
| Hazard identification No      | 33  |
| <b>Emergency Action Code</b>  | 2YE |

#### Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

|                            |    |
|----------------------------|----|
| <b>Classification code</b> | F1 |
| <b>Danger label(s)</b>     | 3  |



|                                 |     |
|---------------------------------|-----|
| <b>Excepted quantities (EQ)</b> | E2  |
| <b>Limited quantities (LQ)</b>  | 1 L |



# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

|   |                                       |
|---|---------------------------------------|
| <b>Transport category (TC)</b>  | 2                                     |
| <b>Hazard identification No</b>   | 33                                    |
| <b>International Maritime Dangerous Goods Code (IMDG) - Additional information</b>        |                                       |
| Proper shipping name  | METHYLAL                              |
| Particulars in the shipper's declaration  | UN1234, METHYLAL, 3, II, -30,5°C c.c. |
| Marine pollutant  | -                                     |
| Danger label(s)   | 3                                     |
|          |                                       |
| Special provisions (SP)   | -                                     |
| Excepted quantities (EQ)  | E2                                    |
| Limited quantities (LQ)   | 1 L                                   |
| EmS   | F-E, S-D                              |
| Stowage category  | E                                     |
| <b>International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information</b> |                                       |
| Proper shipping name  | Methylal                              |
| Particulars in the shipper's declaration  | UN1234, Methylal, 3, II               |
| Danger label(s)   | 3                                     |
|        |                                       |
| Excepted quantities (EQ)  | E2                                    |
| Limited quantities (LQ)   | 1 L                                   |

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Relevant provisions of the European Union (EU)

##### Seveso Directive

| 2012/18/EU (Seveso III) |                                       |   |       |
|-------------------------|---------------------------------------|---|-------|
| No                      | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes |
| P5c                     | flammable liquids (cat. 2, 3)         | 5.000 50.000  | 51)   |

##### Notation

51) Flammable liquids, categories 2 or 3 not covered by P5a and P5b

##### Deco-Paint Directive

|             |       |
|-------------|-------|
| VOC content | 100 % |
|-------------|-------|

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



**Methylal SOLVAGREEN® ≥99,9 % for synthesis**

article number: **3154**

## Industrial Emissions Directive (IED)

|             |       |
|-------------|-------|
| VOC content | 100 % |
|-------------|-------|

## Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

## Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

## Water Framework Directive (WFD)

not listed

## Regulation on the marketing and use of explosives precursors

not listed

## Regulation on drug precursors

not listed

## Regulation on substances that deplete the ozone layer (ODS)

not listed

## Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

## Regulation on persistent organic pollutants (POP)

not listed

## National regulations(GB)

## List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

## Restrictions according to GB REACH, Annex 17

| Dangerous substances with restrictions (GB REACH, Annex 17) |  |        |    |
|---|--|--------|----|
| Name of substance   | Name acc. to inventory   | CAS No | No |
| Methylal  | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC |        | 3  |
| Methylal  | flammable / pyrophoric   |        | 40 |

## Other information

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

## National inventories

| Country | Inventory  | Status              |
|---------|------------|---------------------|
| AU      | AIIC       | substance is listed |
| CA      | DSL        | substance is listed |
| CN      | IECSC      | substance is listed |
| EU      | ECSI       | substance is listed |
| EU      | REACH Reg. | substance is listed |
| JP      | CSCL-ENCS  | substance is listed |
| KR      | KECI       | substance is listed |

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

| Country | Inventory | Status                       |
|---------|-----------|------------------------------|
| MX      | INSQ      | substance is listed          |
| NZ      | NZIoC     | substance is listed          |
| PH      | PICCS     | substance is listed          |
| TR      | CICR      | substance is listed          |
| TW      | TCSI      | substance is listed          |
| US      | TSCA      | substance is listed (ACTIVE) |
| VN      | NCI       | substance is listed          |

### Legend

|            |   |
|------------|---|
| AIIC       | Australian Inventory of Industrial Chemicals                            |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)  |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NCI        | National Chemical Inventory   |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances (PICCS)       |
| REACH Reg. | REACH registered substances   |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act   |

## 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

## SECTION 16: Other information

### Indication of changes (revised safety data sheet)

| Section | Former entry (text/value) | Actual entry (text/value)  | Safety-relevant |
|---------|---------------------------|--|-----------------|
| 2.3     |                           | Endocrine disrupting properties:<br>Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%. | yes             |
| 15.1    |                           | National inventories:<br>change in the listing (table)   | yes             |

### Abbreviations and acronyms

| Abbr.     | Descriptions of used abbreviations  |
|-----------|---|
| ADR       | Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)                     |
| BCF       | Bioconcentration factor   |
| CAS       | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)  |
| Ceiling-C | Ceiling value   |
| DGR       | Dangerous Goods Regulations (see IATA/DGR)  |
| DNEL      | Derived No-Effect Level   |
| EC50      | Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval  |
| EC No     | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union) |
| ED        | Endocrine disruptor   |

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



## Methylal SOLVAGREEN® ≥99,9 % for synthesis

article number: 3154

| Abbr.     | Descriptions of used abbreviations  |
|-----------|---|
| EH40/2005 | EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> ) |
| EINECS    | European Inventory of Existing Commercial Chemical Substances   |
| ELINCS    | European List of Notified Chemical Substances   |
| EmS       | Emergency Schedule  |
| GB REACH  | The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)  |
| GHS       | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations   |
| IATA      | International Air Transport Association   |
| IATA/DGR  | Dangerous Goods Regulations (DGR) for the air transport (IATA)  |
| ICAO      | International Civil Aviation Organization   |
| ICAO-TI   | Technical instructions for the safe transport of dangerous goods by air   |
| IMDG      | International Maritime Dangerous Goods Code   |
| IMDG-Code | International Maritime Dangerous Goods Code   |
| LC50      | Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval                                     |
| LD50      | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval  |
| LEL       | Lower explosion limit (LEL)   |
| NLP       | No-Longer Polymer   |
| NOEC      | No Observed Effect Concentration  |
| PBT       | Persistent, Bioaccumulative and Toxic   |
| PNEC      | Predicted No-Effect Concentration   |
| ppm       | Parts per million   |
| REACH     | Registration, Evaluation, Authorisation and Restriction of Chemicals  |
| RID       | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)               |
| STEL      | Short-term exposure limit   |
| TWA       | Time-weighted average   |
| UEL       | Upper explosion limit (UEL)   |
| VOC       | Volatile Organic Compounds  |
| vPvB      | Very Persistent and very Bioaccumulative  |
| WEL       | Workplace exposure limit  |

### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### List of relevant phrases (code and full text as stated in section 2 and 3)

| Code | Text                                |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |

# Safety data sheet Safety data sheet

acc. to Regulation (EC) No. 1907/2006 (REACH)



**Methylal SOLVAGREEN® ≥99,9 % for synthesis**

article number: **3154**

---

## **Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.