

Safety Data Sheets

Flow VIT[®] Alicyclobacillus

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

Printing date 29.08.2017

Revision: 29.08.2017

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

1.1 Product identifier

Trade name: Solution D1F

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

No further relevant information available.

Application of the substance / the preparation: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

vermicon AG
Emmy-Noether-Str. 2
D-80992 München
Telefon: +49 (0) 89 1 58 82-0
Telefax: +49 (0) 89 1 58 82-1 00
support@vermicon.com

Further information obtainable from:

vermicon AG
Responsible person: Claudia Beimfohr
E-mail: beimfohr@vermicon.com

1.4 Emergency telephone number:

Giftnotruf München / Poison Information Center Munich
+49 89 19240 (7d / 24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:

The product is not classified according to the CLP regulation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

2.3 Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 60-00-4 edetic acid 0.1-≤2.5%

EINECS: 200-449-4  Eye Irrit. 2, H319

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

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

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

(Contd. on page 2)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: Solution D1F

(Contd. of page 1)

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Call for a doctor immediately.

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:

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Protective equipment:

Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information:

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Wear protective clothing.

6.2 Environmental precautions: 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).

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:

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Store in cool, dry place in tightly closed receptacles.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 3)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: Solution D1F

(Contd. of page 2)

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands: Protective gloves

Material of gloves:

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

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.

Eye protection: Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:

Appearance:

Form:	Fluid
Colour:	Clear
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	7.4

Change in condition:

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

Flash point:	Not applicable.
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Flammability (solid, gas):	Not applicable.
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Ignition temperature:

Decomposition temperature:	Not determined.
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Auto-ignition temperature:	Product is not selfigniting.
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Explosive properties:	Product does not present an explosion hazard.
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Explosion limits:

Lower:	Not determined.
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(Contd. on page 4)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: Solution D1F

(Contd. of page 3)

Upper:	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information:	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity:** No further relevant information available.
- 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:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects:**
- Acute toxicity** Based on available data, the classification criteria are not met.
- 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 (carcinogenicity, 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) (Self-assessment): slightly hazardous for water

(Contd. on page 5)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: Solution D1F

(Contd. of page 4)

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.

European waste catalogue:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number:

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name:

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es):

ADR, ADN, IMDG, IATA
Class: Void

14.4 Packing group:

ADR, IMDG, IATA Void

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

UN "Model Regulation": Void

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 None of the ingredients is listed.

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.

Relevant phrases:

H319 Causes serious eye irritation.

Training hints:

Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

Department issuing SDS:

ADEEGO GmbH
Wildsteig 4A

(Contd. on page 6)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: Solution D1F

(Contd. of page 5)

D-42113 Wuppertal
Tel. +49 (0) 202 2575700
Fax. +49 (0) 202 2575701
Email: mail@adeego.de
www.adeego.de

Contact: Dr. Axel Deeg

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

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

Printing date 24.08.2017

Revision: 24.08.2017

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

1.1 Product identifier

Trade name: Solution G

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

No further relevant information available.

Application of the substance / the preparation: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

vermicon AG
Emmy-Noether-Str. 2
D-80992 München
Telefon: +49 (0) 89 1 58 82-0
Telefax: +49 (0) 89 1 58 82-1 00
support@vermicon.com

Further information obtainable from:

vermicon AG
Responsible person: Claudia Beimfohr
E-mail: beimfohr@vermicon.com

1.4 Emergency telephone number:

Giftnotruf München / Poison Information Center Munich
+49 89 19240 (7d / 24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:

The product is not classified according to the CLP regulation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

2.3 Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 56-81-5 glycerol 10-25%

EINECS: 200-289-5 substance with a Community workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

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

(Contd. on page 2)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution G

(Contd. of page 1)

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Call for a doctor immediately.

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:

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Protective equipment:

Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information:

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Wear protective clothing.

6.2 Environmental precautions: 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).

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:

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Store in cool, dry place in tightly closed receptacles.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

(Contd. on page 3)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution G

(Contd. of page 2)

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:

56-81-5 glycerol

WEL Long-term value: 10 mg/m³

8.2 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands: Protective gloves

Material of gloves:

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

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.

Eye protection: Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:

Appearance:

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

pH-value:	Not determined.
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Change in condition:

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

Flash point:	Not applicable.
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Flammability (solid, gas):	Not applicable.
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Ignition temperature:

Decomposition temperature:	Not determined.
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Auto-ignition temperature:	Product is not selfigniting.
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Explosive properties:	Product does not present an explosion hazard.
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Explosion limits:

Lower:	Not determined.
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(Contd. on page 4)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution G

(Contd. of page 3)

Upper:	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information:	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity:** No further relevant information available.
- 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:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects:**
- Acute toxicity** Based on available data, the classification criteria are not met.
- 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 (carcinogenicity, 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) (Self-assessment): slightly hazardous for water

(Contd. on page 5)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution G

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. (Contd. of page 4)

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.

European waste catalogue:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number:

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name:

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es):

ADR, ADN, IMDG, IATA
Class: Void

14.4 Packing group:

ADR, IMDG, IATA Void

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

UN "Model Regulation": Void

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 None of the ingredients is listed.

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.

Training hints:

Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

Department issuing SDS:

ADEEGO GmbH

Wildsteig 4A

D-42113 Wuppertal

Tel. +49 (0) 202 2575700

(Contd. on page 6)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution G

(Contd. of page 5)

Fax. +49 (0) 202 2575701

Email: mail@adeego.de

www.adeego.de

Contact: Dr. Axel Deeg

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

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

Printing date 24.08.2017

Revision: 24.08.2017

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

1.1 Product identifier

Trade name: Solution P

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

No further relevant information available.

Application of the substance / the preparation: Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

vermicon AG
Emmy-Noether-Str. 2
D-80992 München
Telefon: +49 (0) 89 1 58 82-0
Telefax: +49 (0) 89 1 58 82-1 00
support@vermicon.com

Further information obtainable from:

vermicon AG
Responsible person: Claudia Beimfohr
E-mail: beimfohr@vermicon.com

1.4 Emergency telephone number:

Giftnotruf München / Poison Information Center Munich
+49 89 19240 (7d / 24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:

The product is not classified according to the CLP regulation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

2.3 Other hazards:

Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components: Void

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

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information:

Take affected persons out into the fresh air.

Do not leave affected persons unattended.

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

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

(Contd. on page 2)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution P

(Contd. of page 1)

After swallowing: Call for a doctor immediately.

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:

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Protective equipment:

Mouth respiratory protective device.

Do not inhale explosion gases or combustion gases.

Additional information:

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Wear protective clothing.

6.2 Environmental precautions: 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).

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:

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Store in cool, dry place in tightly closed receptacles.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

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.

(Contd. on page 3)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution P

(Contd. of page 2)

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Respiratory protection: Not necessary if room is well-ventilated.

Protection of hands: Protective gloves

Material of gloves:

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

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.

Eye protection: Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:

Appearance:

Form:	Fluid
Colour:	Clear
Odour:	Characteristic
Odour threshold:	Not determined.
pH-value:	Not determined.

Change in condition:

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

(Contd. on page 4)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution P

(Contd. of page 3)

Vapour pressure at 20 °C:	23 hPa
Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with water:	Fully miscible.
Partition coefficient: n-octanol/water:	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information:	No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity:** No further relevant information available.
- 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:** Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects:**
- Acute toxicity** Based on available data, the classification criteria are not met.
- 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 (carcinogenicity, 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) (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.

(Contd. on page 5)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution P

(Contd. of page 4)

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.

European waste catalogue:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number:

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name:

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es):

ADR, ADN, IMDG, IATA
Class: Void

14.4 Packing group:

ADR, IMDG, IATA Void

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable.

UN "Model Regulation": Void

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 None of the ingredients is listed.

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.

Training hints:

Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

Department issuing SDS:

ADEEGO GmbH

Wildsteig 4A

D-42113 Wuppertal

Tel. +49 (0) 202 2575700

Fax. +49 (0) 202 2575701

Email: mail@adeego.de

(Contd. on page 6)

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

Printing date 24.08.2017

Revision: 24.08.2017

Trade name: Solution P

(Contd. of page 5)

www.adeego.de

Contact: Dr. Axel Deeg

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

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

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

Printing date 29.08.2017

Revision: 29.08.2017

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

1.1 Product identifier

Trade name: VIT F (Ali)

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

No further relevant information available.

Application of the substance / the preparation:

Laboratory chemicals
(For professional users only)

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

vermicon AG
Emmy-Noether-Str. 2
D-80992 München
Telefon: +49 (0) 89 1 58 82-0
Telefax: +49 (0) 89 1 58 82-1 00
support@vermicon.com

Further information obtainable from:

vermicon AG
Responsible person: Claudia Beimfohr
E-mail: beimfohr@vermicon.com

1.4 Emergency telephone number:

Giftnotruf München / Poison Information Center Munich
+49 89 19240 (7d / 24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008:



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 1B H360FD May damage fertility. May damage the unborn child.

STOT RE 2 H373 May cause damage to the blood through prolonged or repeated exposure. Route of exposure: Inhalation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008:

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

Hazard pictograms:



GHS08

Signal word: Danger

Hazard-determining components of labelling:

formamide

Hazard statements:

H351 Suspected of causing cancer.

H360FD May damage fertility. May damage the unborn child.

H373 May cause damage to the blood through prolonged or repeated exposure. Route of exposure: Inhalation.

(Contd. on page 2)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: VIT F (Ali)

(Contd. of page 1)

Precautionary statements:

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P314 Get medical advice/attention if you feel unwell.
- P405 Store locked up.
- 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

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

CAS: 75-12-7	formamide	25-50%
EINECS: 200-842-0	 Carc. 2, H351; Repr. 1B, H360; STOT RE 2, H373	

SVHC:

75-12-7 formamide

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

SECTION 4: First aid measures

4.1 Description of first aid measures:

General information:

Take affected persons out into the fresh air.
Do not leave affected persons unattended.

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

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Call for a doctor immediately.

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:

Formation of toxic gases is possible during heating or in case of fire.

5.3 Advice for firefighters:

Protective equipment:

Mouth respiratory protective device.
Do not inhale explosion gases or combustion gases.

(Contd. on page 3)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: VIT F (Ali)

(Contd. of page 2)

Additional information:

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation.

Wear protective clothing.

6.2 Environmental precautions: 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).

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:

Keep away from heat and direct sunlight.

Ensure good ventilation/exhaustion at the workplace.

Store in cool, dry place in tightly closed receptacles.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Store in a cool location.

Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidising agents.

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:

75-12-7 formamide

WEL Short-term value: 56 mg/m³, 30 ppm

Long-term value: 37 mg/m³, 20 ppm

8.2 Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Pregnant women should strictly avoid inhalation or skin contact.

(Contd. on page 4)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: VIT F (Ali)

(Contd. of page 3)

Respiratory protection:

Not necessary if room is well-ventilated.

Short term filter device:

Filter A

Protection of hands: Protective gloves

Material of gloves:

Butyl rubber, BR

Recommended thickness of the material: ≥ 0.5 mm

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.

Eye protection: Tightly sealed goggles

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

General Information:

Appearance:

Form: Fluid

Colour: Clear

Odour: Characteristic

Odour threshold: Not determined.

pH-value: Not determined.

Change in condition:

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gas): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure at 20 °C: 23 hPa

Density: Not determined.

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with

water: Fully miscible.

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

Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

(Contd. on page 5)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: VIT F (Ali)

9.2 Other information:

No further relevant information available.

(Contd. of page 4)

SECTION 10: Stability and reactivity

10.1 Reactivity: No further relevant information available.

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: Carbon monoxide and carbon dioxide

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:

75-12-7 formamide

Oral LD50 5570 mg/kg (rat)

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 (carcinogenicity, mutagenicity and toxicity for reproduction):

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

May damage fertility. May damage the unborn child.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to the blood through prolonged or repeated exposure. Route of exposure: Inhalation.

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) (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.

12.5 Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

(Contd. on page 6)

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

Printing date 29.08.2017

Revision: 29.08.2017

Trade name: VIT F (Ali)

(Contd. of page 5)

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.

European waste catalogue:

Dispose of contents/container in accordance with local/regional/national/international regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

14.1 UN-Number:

ADR, ADN, IMDG, IATA Void

14.2 UN proper shipping name:

ADR, ADN, IMDG, IATA Void

14.3 Transport hazard class(es):

ADR, ADN, IMDG, IATA

Class: Void

14.4 Packing group:

ADR, IMDG, IATA Void

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user: Not applicable.

14.7 Transport in bulk according to Annex II of

Marpol and the IBC Code Not applicable.

UN "Model Regulation": Void

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 None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 30

National regulations:

Other regulations, limitations and prohibitive regulations:

Substances of very high concern (SVHC) according to REACH, Article 57:

75-12-7 formamide

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.

Relevant phrases:

H351 Suspected of causing cancer.

H360 May damage fertility or the unborn child.

H373 May cause damage to the blood through prolonged or repeated exposure. Route of exposure:

Inhalation.

Training hints:

Employees who use the product have to be trained on risks for health, hygiene, use of individual protection, accident preventive actions, rescue actions, etc.,

(Contd. on page 7)

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

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Trade name: VIT F (Ali)

(Contd. of page 6)

Department issuing SDS:

ADEEGO GmbH
Wildsteig 4A
D-42113 Wuppertal
Tel. +49 (0) 202 2575700
Fax. +49 (0) 202 2575701
Email: mail@adeego.de
www.adeego.de

Contact: Dr. Axel Deeg

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
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Carc. 2: Carcinogenicity – Category 2
Repr. 1B: Reproductive toxicity – Category 1B
Repr. 1B: Reproductive toxicity – Category 1B
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
