

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: TEGO® Variplus DS 50

Chemical name:

Aqueous polyurethane polyol dispersion

Other means of identification

Recommended restrictions

Recommended use: Industrial Use

Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
2 Turner Place
Piscataway, NJ 08854
USA

Telephone : +1 732 981 5000

E-mail : product-regulatory-services@evonik.com

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency : 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: No labeling is required under Regulation 29 CFR 1910.1200 (US GHS).

Precautionary Statements Not a hazardous substance or mixture.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Chemical name:

Aqueous polyurethane polyol dispersion

Mixtures

Chemical Identity	CAS number	Content in percent (%) [*]
2-Ethylhexane-1,3-diol	94-96-2	<0.05%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information:	Remove soiled or soaked clothing immediately
Inhalation:	Ensure supply of fresh air. In the event of symptoms seek medical advice.
Skin Contact:	In case of contact with skin wash off immediately with plenty of water In the event of symptoms seek medical advice.
Eye contact:	In case of contact with eyes rinse thoroughly with water. In the event of symptoms seek medical advice.
Ingestion:	Thoroughly clean the mouth with water In the event of symptoms seek medical advice.
Personal Protection for First-aid Responders:	Do not inhale explosion and/or combustion gases, Self-contained breathing apparatus.

Most important symptoms/effects, acute and delayed

Symptoms:	No special hints.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	Treat symptomatically.
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5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	foam, carbon dioxide, dry powder, water spray.
Unsuitable extinguishing media:	Full water jet

Specific hazards arising from the chemical:	In the event of fire the following can be released: - carbon dioxide, carbon monoxide Under certain conditions of combustion traces of other toxic substances cannot be excluded
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Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No specific precautions.
Special protective equipment for fire-fighters:	Do not inhale explosion and/or combustion gases Self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment.
Methods and material for containment and cleaning up:	Take up with absorbent material (eg sand, kieselguhr, universal binder) Dispose of absorbed material in accordance with the regulations.
Environmental Precautions:	Do not allow to enter drains or waterways Do not discharge into the subsoil/soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	No data available.
Safe handling advice:	Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes.No special measures necessary if stored and handled as prescribed.
Contact avoidance measures:	No data available.
Hygiene measures:	Do not eat, drink or smoke when working. Wash hands before breaks and immediately after handling the product. Remove soiled or soaked clothing immediately.

Storage

Safe storage conditions:	Keep container closed.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

Eye/face protection: This product is not classified as a hazardous substance. Any necessity for eye protection must be determined within the scope of a risk assessment.

Skin Protection

Hand Protection:

Additional Information: gloves made of nitril (NBR), The protective gloves to be worn must satisfy the specifications of Regulation (EU) 2016/425 and the resulting Standard EN374., Specific workplace situations must be considered separately.

Skin and Body Protection:	protective clothing
Respiratory Protection:	in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2
Hygiene measures:	Do not eat, drink or smoke when working. Wash hands before breaks and immediately after handling the product. Remove soiled or soaked clothing immediately.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	Opaque
Odor:	Slight
Odor Threshold:	not measured
pH:	8.5 - 9.5 (23 °C)
Freezing point:	approx. 130 - 150 °C
Boiling Point:	not measured
Flash Point:	> 200 °F
Evaporation Rate:	not measured
Flammability (solid, gas):	no data available

Explosive limit - upper (%):	not measured
Explosive limit - lower (%):	not measured
Vapor pressure:	23 hPa (20 °C)
Vapor density (air=1):	not measured
Density:	1.054 g/cm ³
Relative density:	No data available.
Solubility(ies)	
Solubility in Water:	Soluble
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Self Ignition Temperature:	not measured
Decomposition Temperature:	not measured
Kinematic viscosity:	No data available.
Dynamic viscosity:	approx. 400 mPa.s (23 °C)

Other information

Explosive properties:	not measured
Oxidizing properties:	not measured
Minimum ignition temperature:	Not applicable
Metal Corrosion:	not measured

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions"
Chemical Stability:	The product is stable under normal conditions.
Possibility of hazardous reactions:	No hazardous reactions with proper storage and handling.

Conditions to avoid:	Unknown
Incompatible Materials:	Unknown
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	If handled correctly, not a relevant route of exposure. Information on effects are given below.
Skin Contact:	Relevant route of exposure. Information on effects are given below.
Eye contact:	Relevant route of exposure. Information on effects are given below.
Ingestion:	If handled correctly, not a relevant route of exposure. Information on effects are given below.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	LD 50 (Rat): > 2,000 mg/kg
Dermal	
Product:	no data available
Inhalation	
Product:	no data available

Repeated dose toxicity

Product:	no data available
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Skin Corrosion/Irritation

Product:	no data available
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Serious Eye Damage/Eye Irritation

Product:	no data available
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Respiratory or Skin Sensitization

Product:	no data available
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Carcinogenicity

Product:	No data available.
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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity**In vitro****Product:** bacterial reverse mutation assay (e.g. Ames test) (OECD 471): negative**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** no data available**Specific Target Organ Toxicity - Repeated Exposure****Product:** no data available**Aspiration Hazard****Product:** Not classified**Other effects:**

Proper use provided, no adverse health effects have been observed or have been come to our knowledge.

12. Ecological information**Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Chronic hazards to the aquatic environment:****Fish****Product:** No data available.**Aquatic Invertebrates****Product:** No data available.**Toxicity to Aquatic Plants****Product:** No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: not measured

Mobility in soil:

No data available.

Components:

2-Ethylhexane-1,3-diol No data available.

Other adverse effects:

Do not allow to enter soil, waterways or waste water canal. Do not allow to enter soil, waterways or waste water canal.

13. Disposal considerations

Disposal methods:

In accordance with local authority regulations, take to special waste incineration plant

Contaminated Packaging:

If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

14. Transport information

Domestic regulation

49 CFR

Not regulated as a dangerous good

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. Regulatory information
US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

<u>Chemical Identity</u>	<u>OSHA hazard(s)</u>
Formaldehyde	Acute toxicity Skin irritation Skin sensitization Flammability Respiratory tract irritation. Respiratory sensitization Cancer Eye irritation

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Ethanone, 1-phenyl-	5000 lbs.
Formaldehyde	100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories

Not classified

SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Formaldehyde	100 lbs.	500 lbs.

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances
SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Formaldehyde	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Formaldehyde	15000 lbs

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations
US. California Proposition 65



WARNING: This product can expose you to chemicals including, Formaldehyde, which is [are] known to the State of California to cause cancer.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:

US TSCA Inventory:	Included on Inventory.
Canada DSL Inventory List:	Included on Inventory.

16. Other information, including date of preparation or last revision
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HMIS Hazard ID

Health	1
Flammability	1
Physical Hazards	0
PERSONAL PROTECTION	X

Ask supervisor or safety specialist for handling instructions

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

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Further Information: none

Revision Information: Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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