

SAFETY DATA SHEET

1. Identification

Product identifier: TEGO® Variplus 1201 TF

Chemical name: Polyurethane polyol resin

Other means of identification

Recommended use: Industrial use

Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name	: Evonik Australia Pty Ltd Suites 33&37 1 Ricketts Road Mt Waverley, VIC 3149 Australia

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24-Hour Health	: +61 2 9037 2994
Emergency	
	+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Classification according to GHS

Physical Hazards	
Flammable liquids	Category 2
Health Hazards	
Acute toxicity (Oral)	Category 5
Skin Corrosion/Irritation	Category 3
Serious Eye Damage/Eye Irritation	Category 2A
Specific Target Organ Toxicity - Single Exposure	Category 3 (Narcotic effect.)

Label Elements



Hazard Symbol:

Signal Word:	Danger
Hazard Statement:	Highly flammable liquid and vapor. May be harmful if swallowed. Causes mild skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary Statements	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection.
Response:	Call a POISON CENTER or doctor/ physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal:	Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.
Other hazards:	None known.

3. Composition/information on ingredients

Chemical name:

Polyurethane polyol resin

Mixtures



Common name and synonyms	CAS number	Content in percent (%)*
No data	141-78-6	30 - 60%
	name and synonyms	name and synonymsCAS numberNo data141-78-6

* 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:	fresh air supply, consult a doctor if feeling unwell.	
Skin Contact:	In case of contact with skin wash off immediately with plenty of water In case of discomfort: Supply with medical care.	
Eye contact:	In case of contact with eyes rinse thoroughly with plenty of water. If symptoms persist, seek medical advice.	
Ingestion:	Thoroughly clean the mouth with water In case of discomfort: Supply with medical care.	
Personal Protection for First-aid Responders:	No data available.	
Most important symptoms and effects, both acute and delayed		
Symptoms:	Serious eye irritation Depending on the dose inhalation and/or ingestion may cause: headache, inebriation, unconsciousness.	
Hazards:	No data available.	
Indication of immediate medical attention an Treatment:	d special treatment needed Treat symptomatically.	

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing Suitable extinguishing media:	media Foam, carbon dioxide or dry powder.
Unsuitable extinguishing media:	High volume water jet.
Special hazards arising from the substance or mixture:	In the event of fire the following can be released: - carbon dioxide, carbon monoxide - Nitrogen oxides (NOx) Under certain conditions of combustion traces of other toxic substances cannot be excluded



Special protective equipment and precautions for firefighters	
Special fire fighting procedures:	Keep away from sources of ignition - no smoking. Take action to prevent static discharges. Vapours may form explosive mixtures with air. Cool endangered containers by water spray
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. Keep away sources of ignition. Ensure adequate ventilation.
Accidental release measures:	No data available.
Methods and material for containment and cleaning up:	Take up with absorbent material (eg sand, kieselguhr, acid binder, universal binder, sawdust). Dispose of absorbed material in accordance with the regulations.
Environmental Precautions:	Do not allow to enter drains or waterways Prevent product from getting into subsoil/soil.

7. Handling and storage

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.Provide good ventilation of working area (local exhaust ventilation if necessary). Use respiratory protection during spraying.Contact avoidance measures:No data available.StorageSafe storage conditions:Keep container tightly closed in a cool, well-ventilated place.Safe packaging materials:No data available.	Handling	
skin and eyes.Provide good ventilation of working area (local exhaust ventilation if necessary). Use respiratory protection during spraying. Contact avoidance measures: No data available. Storage Safe storage conditions: Keep container tightly closed in a cool, well-ventilated place.		No data available.
Storage Safe storage conditions: Keep container tightly closed in a cool, well-ventilated place.	Safe handling advice:	skin and eyes. Provide good ventilation of working area (local exhaust ventilation if necessary). Use respiratory protection
Safe storage conditions: Keep container tightly closed in a cool, well-ventilated place.	Contact avoidance measures:	No data available.
	Storage	
Safe packaging materials: No data available.	Safe storage conditions:	Keep container tightly closed in a cool, well-ventilated place.
	Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Observe national threshold limit values.



Biological Limit Values	
Observe national threshold limit values.	
Appropriate Engineering Controls	No data available.
Individual protection measures, such as per	sonal protective equipment
General information:	No data available.
Eye/face protection:	Safety glasses
Skin Protection	
Hand Protection:	Material: Nitrile rubber. Break-through time: 480 min Glove thickness: 0.1 mm
Other:	protective clothing
Respiratory Protection:	in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2
Hygiene measures:	Wash hands before breaks and immediately after handling the product. Remove soiled or soaked clothing immediately. When using do not eat, drink or smoke.

9. Physical and chemical properties

Physical state:	liquid
Form:	liquid
Color:	colorless to yellowish
Odor:	solvent-like
Odor Threshold:	not measured
Freezing point:	not measured
Boiling Point:	Approximate 167 °F/75 °C Solvent
Flammability:	not measured
pper/lower limit on flammability or e	xplosive limits
Explosive limit - upper:	not measured
Explosive limit - lower:	not measured
Flash Point:	Approximate 25 °F/-4 °C (DIN 53213)
Autoignition Temperature:	not measured
Decomposition Temperature:	not measured
pH:	Not applicable
Viscosity	
Dynamic viscosity:	Approximate 2,000 mPa.s (68 °F/20 °C, DIN 53015)
Kinematic viscosity:	Approximate 1923 mm2/s (68 °F/20 °C, calculated)



Flow Time:	No data available.	
Solubility(ies)		
Solubility in Water:	partly soluble	
Solubility (other):	not measured	
Partition coefficient (n- octanol/water):	not measured	
Vapor pressure:	not measured	
Relative density:	not measured	
Density:	Approximate 1.04 g/cm3 (68 °F/20 °C)	
Bulk density: Relative vapor density:	No data available. not measured	
Other information		
Explosive properties:	not measured	
Oxidizing properties:	not oxidizing	
Minimum ignition temperature:	not measured	
Metal Corrosion:	Not corrosive to metals	
Evaporation Rate:	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:	Open flames, sparks or input of much heat
Incompatible Materials:	Not known.
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information

Information on toxicological effects

Information on likely routes of exposure

Inhalation:	Information on effects are given below.
Skin Contact:	Information on effects are given below.
Eye contact:	Information on effects are given below.
Ingestion:	Information on effects are given below.



Acute toxicity (list all possible routes of exposure)

Oral Product: Components: Ethyl acetate	LD 50 (ATEmix): 4,902 mg/kg LD 50 (Rabbit): 4,934 mg/kg
Dermal Product: Components: Ethyl acetate	No data available. LD 50 (Rabbit): > 20,000 mg/kg
Inhalation Product: Components: Ethyl acetate	No data available. No classification, Vapour Not applicable, Dust and mist
Repeated dose toxicity Product: Components: Ethyl acetate	No data available. NOAEL (Rat(Female, Male), Oral): 900 mg/kg LOAEL (Rat(Female, Male), Oral): 3,600 mg/kg
Skin Corrosion/Irritation Product: Components: Ethyl acetate	No data available. Not irritating
Serious Eye Damage/Eye Irritation Product: Components: Ethyl acetate	No data available. OECD 405 (Rabbit): Irritating.
Respiratory or Skin Sensitization Product: Components: Ethyl acetate Carcinogenicity Product: Components: Ethyl acetate	No data available. Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer. Not a respiratory sensitizer No data available. Not classified
Germ Cell Mutagenicity	
No data available.	



In vitro Product: Components: Ethyl acetate	No data available. Ames test (OECD 471): negative
In vivo Product:	No data available.
Components: Ethyl acetate	Micronucleus test (OECD 474) (Hamster): negative
Reproductive toxicity Product:	No data available.
Components: Ethyl acetate	Not classified
Specific Target Organ Toxicity Product:	- Single Exposure No data available.
Components: Ethyl acetate	Inhalation - vapor: Central nervous system Category 3 with narcotic effects. May cause drowsiness or dizziness.
Specific Target Organ Toxicity Product:	- Repeated Exposure No data available.
Components: Ethyl acetate	Not classified
Aspiration Hazard Product:	Not classified
Components: Ethyl acetate	Not classified
Information on health hazards	
Other hazards Product:	No data available.
12. Ecological information	
Ecotoxicity: Acute hazards to the aquation	environment:
Fish Product: Components:	No data available.
Ethyl acetate	LC 50 (Pimephales promelas, 96 h): 230 mg/l
Aquatic Invertebrates Product:	No data available.
Components: Ethyl acetate	No data available.
Toxicity to Aquatic Plants Product: Components:	No data available.



Ethyl acetate	No data available.	
Toxicity to microorganisms Product: Components: Ethyl acetate	No data available. No data available.	
Toxicity to soil dwelling organisms Product: No data available.		
Components: Ethyl acetate	No data available.	
Toxicity to terrestrial organisms Product: No data available.		
Components: Ethyl acetate	No data available.	

Chronic hazards to the aquatic environment:

Fish Product: Components: Ethyl acetate	No data available. No data available.
Aquatic Invertebrates Product: Components: Ethyl acetate	No data available. NOEC (Daphnia magna, 21 d): 2.4 mg/l (OECD 211)
Toxicity to Aquatic Plants Product: Components: Ethyl acetate	No data available. NOEC (Desmodesmus subspicatus (green algae), 72 h): > 100 mg/l (OECD 201)
Toxicity to microorganisms Product: Components: Ethyl acetate	No data available. No data available.
Toxicity to soil dwelling org Product: Components: Ethyl acetate	anisms No data available. No data available.
Toxicity to terrestrial organi Product: Components: Ethyl acetate	sms No data available. No data available.
Persistence and Degradability	/
Biodegradation Product: Components: Ethyl acetate	No data available. 69 % (20 d) The 10 day time window criterion is not fulfilled., aerobic



BOD/COD Ratio Product: Components: Ethyl acetate	No data available. No data available.
Bioaccumulative potential	
Bioconcentration Factor (BC	
Product:	No data available.
Components: Ethyl acetate	No data available.
Partition Coefficient n-octan	
Product:	Log Kow: not measured
Components: Ethyl acetate	Log Kow: 0.68 25 °C (OPPTS 830.7560) No
Mobility in soil:	
Product Components:	No data available.
Ethyl acetate	No data available.
Product	No data available.
Components: Ethyl acetate	No data available.
Other adverse effects:	
Other hazards Product:	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	
ADG	
UN number or ID number :	UN 1866
Proper shipping name :	RESIN SOLUTION
Class	3
Packing group :	: II
Labels :	3
Hazchem Code :	•3YE
International Regulations	



IATA-DGR	
UN/ID No. : UN 1866	
Proper shipping name : Resin solution	
Class : 3	
Packing group : II	
Labels : 3	
Packing instruction (cargo : 364	
aircraft)	
Packing instruction : 353	
(passenger aircraft)	
IMDG-Code	
UN number or ID number : UN 1866	
Proper shipping name : RESIN SOLUTION	
Class : 3	
Packing group : II	
Labels : 3	
EmS Code : F-E, <u>S-E</u>	
Marine pollutant : no	
Remarks : Stowage category B	

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

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

International regulations

Montreal protocol Not applicable

Stockholm convention Not applicable

Rotterdam convention

Not applicable

Kyoto protocol Not applicable

16.Other information, including date of preparation or last revision		
Issue Date:	19.08.2021	
Version #:	1.1	

REG_GHS 2023-06-02



Further Information:	No data available.
Revision Information:	Changes since the last version are highlighted in the margin. This version replaces all previous versions.
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