

SAFETY DATA SHEET

1. Identification

Product identifier: TEGO® Dispers 672

Chemical name: Solution of a pigment affinity polymer

Other means of identification

Recommended use: Industrial use

Recommended restrictions: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Operations GmbH
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Germany

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2. Hazard(s) identification

Classification according to GHS

Physical Hazards

Flammable liquids Category 3

Health Hazards

Acute toxicity (Oral) Category 5

Specific Target Organ Toxicity -
Single Exposure Category 3
(Narcotic effect.)

Environmental Hazards

Acute hazards to the aquatic
environment Category 3

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement: Flammable liquid and vapor.
 May be harmful if swallowed.
 May cause drowsiness or dizziness.
 Harmful to aquatic life.

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. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/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 INHALED: Remove person to fresh air and keep comfortable for breathing.

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:
 Solution of a pigment affinity polymer

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Butyl acetate	No data available.	123-86-4	30 - 60%
2-methoxy-1-methylethyl acetate	No data	108-65-6	10 - <30%

	available.		
decan-1-ol	No data available.	112-30-1	<5%

* 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:	If inhaled remove from side of exposure to fresh air, seek medical advice.
Skin Contact:	In case of contact with skin wash off with soap and water. In case of discomfort: Supply with medical care.
Eye contact:	In case of contact with eyes rinse thoroughly with water. In case of discomfort: Supply with medical care.
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:	Prolonged skin contact may cause skin irritation and/or dermatitis. Depending on the dose inhalation and/or ingestion may cause: headache, inebriation, unconsciousness.
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: 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 Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for fire-fighters

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. Ensure adequate ventilation. Keep away from sources of ignition - no smoking.
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

Handling

Technical measures (e.g. Local and general ventilation):	No data available.
Safe handling advice:	Avoid contact with skin and eyes. Do not inhale gases/vapours/aerosols. Provide good ventilation of working area (local exhaust ventilation if necessary).
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Keep container tightly closed in a cool, well-ventilated place. Keep away from direct sunlight. Protect from frost.
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 personal protective equipment

General information: No data available.

Eye/face protection: Safety goggles

Skin Protection

Hand Protection: Material: Nitrile rubber.
Break-through time: 30 min
Glove thickness: 0,4 mm

Other: protective clothing

Respiratory Protection: in case of formation of vapours/dusts: Short term: filter apparatus, combination filter A-P2

Hygiene measures: When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties
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Information on basic physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Yellow
Odor: ester-like
Odor Threshold: not measured
Freezing point: not measured
Boiling Point: not measured
Flammability: not measured

Upper/lower limit on flammability or explosive limits

Explosive limit - upper: not measured
Explosive limit - lower: not measured
Flash Point: 73 °F/23 °C (DIN EN ISO 2719)
Self Ignition Temperature: not measured
Decomposition Temperature: not measured
pH: Not applicable

Viscosity

Dynamic viscosity: 460 mPa.s (77 °F/25 °C)
Kinematic viscosity: 459 mm²/s (77 °F/25 °C, calculated)
Flow Time: No data available.

Solubility(ies)

Solubility in Water: Insoluble

Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Vapor pressure:	not measured
Relative density:	not measured
Density:	1,002 g/cm ³ (77 °F/25 °C)
Bulk density:	No data available.
Relative vapor density:	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 direct sunlight Freezing.
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:	LD 50 (Rat): > 2.000 mg/kg (OECD 423)
Components:	

Butyl acetate	LD 50 (Rat): 10.760 mg/kg LD 50 (Rat): 12.789 mg/kg
2-methoxy-1-methylethyl acetate	LD 50 (Rat): 6.190 mg/kg LD 50 (Rat): 6.190 - 10.000 mg/kg LD 50 (Rat): 5.155 mg/kg
decan-1-ol	LD 50 (Rat): > 5.000 mg/kg

Dermal

Product:	No data available.
Components:	
Butyl acetate	LD 50 (Rabbit): > 14.112 mg/kg
2-methoxy-1-methylethyl acetate	LD 50 (Rabbit): > 5.000 mg/kg
decan-1-ol	LD 50 (Rabbit): > 5.000 mg/kg

Inhalation

Product:	No data available.
Components:	
Butyl acetate	LC 50 (Rat, 4 h): 23,4 mg/l Dusts, mists and fumes No data available., Vapour
2-methoxy-1-methylethyl acetate	LC 50 (Rat, 4 h): > 35,7 mg/l Vapour Not applicable, Dusts, mists and fumes
decan-1-ol	Vapour, No data available. Dusts, mists and fumes, No data available.

Repeated dose toxicity

Product:	No data available.
Components:	
Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	No data available.
decan-1-ol	No data available.

Skin Corrosion/Irritation

Product:	No data available.
Components:	
Butyl acetate	OECD 404 (Rabbit): Not irritating
2-methoxy-1-methylethyl acetate	OECD 404 (Rabbit): Not irritating
decan-1-ol	US-EPA-method (Rabbit): Slightly irritating.

Serious Eye Damage/Eye Irritation

Product:	No data available.
Components:	
Butyl acetate	OECD 405 (Rabbit): Not irritating
2-methoxy-1-methylethyl acetate	OECD 405 (Rabbit): Not irritating
decan-1-ol	US-EPA-method (Rabbit): Irritating.

Respiratory or Skin Sensitization

Product:	No data available.
Components:	
Butyl acetate	Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer.
2-methoxy-1-methylethyl acetate	Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer.
decan-1-ol	Buehler Test, OPPTS 870.2600 (Guinea Pig): Not a skin sensitizer.

Carcinogenicity

Product:	No data available.
Components:	
Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	No data available.
decan-1-ol	No data available.

Germ Cell Mutagenicity

No data available.

In vitro

Product:	No data available.
Components:	
Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	No data available.
decan-1-ol	No data available.

In vivo

Product:	No data available.
Components:	
Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	No data available.
decan-1-ol	No data available.

Reproductive toxicity

Product:	No data available.
Components:	
Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	No data available.
decan-1-ol	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
Butyl acetate	Inhalation - vapor: Central nervous system. - Category 3 with narcotic effects. May cause drowsiness or dizziness.
2-methoxy-1-methylethyl acetate	Inhalation - vapor: Central nervous system. - Category 3 with narcotic effects.
decan-1-ol	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	

Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	No data available.
decan-1-ol	No data available.

Aspiration Hazard

Product:	Not classified
Components:	
Butyl acetate	Not classified
2-methoxy-1-methylethyl acetate	Not classified
decan-1-ol	Not classified

Information on health hazards

Other hazards

Product:	No data available.
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12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	

Butyl acetate	LC 50 (Pimephales promelas, 96 h): 18 mg/l
2-methoxy-1-methylethyl acetate	LC 50 (Oncorhynchus mykiss, 96 h): > 100 - 180 mg/l NOEC (Oncorhynchus mykiss, 96 h): 100 mg/l
decan-1-ol	LC 50 (Oncorhynchus mykiss, 96 h): > 4,2 - 5,6 mg/l LC 50 (Oncorhynchus mykiss, 96 h): 5,7 mg/l LC 50 (Alburnus alburnus, 96 h): 7,2 mg/l

Aquatic Invertebrates

Product:	No data available.
Components:	
Butyl acetate	EC 50 (Daphnia magna, 48 h): 44 mg/l
2-methoxy-1-methylethyl acetate	EC 50 (Daphnia magna, 48 h): > 500 mg/l
decan-1-ol	LC 50 (Nitokra spinipes, 96 h): 3,1 mg/l EC 50 (Daphnia magna, 48 h): 7 mg/l

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Butyl acetate	EC 50 (Desmodesmus subspicatus (green algae), 72 h): 647 mg/l growth rate
2-methoxy-1-methylethyl acetate	EC 50 (Algae (Pseudokirchneriella subcapitata), 96 h): > 1.000 mg/l (OECD 201)
decan-1-ol	EC 50 (Selenastrum capricornutum (green algae), 72 h): 1,5 mg/l EC 10 (Selenastrum capricornutum (green algae), 72 h): 0,7 mg/l

Toxicity to microorganisms

Product:	No data available.
Components:	
Butyl acetate	IC 50 (Tetrahymena pyriformis, 40 h): 356 mg/l
2-methoxy-1-methylethyl acetate	EC 10 (activated sludge, 0,5 h): > 1.000 mg/l (OECD 209)
decan-1-ol	EC0 (Pseudomonas putida, 30 min): 10.000 mg/l EC 50 (Pseudomonas putida, 3 h): > 100 mg/l (OECD 209)

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	NOEC (Oryzias latipes, 14 d): 47,5 mg/l (OECD 204) LC 50 (Oryzias latipes, 14 d): 63,5 mg/l (OECD 204)
decan-1-ol	NOEC (Pimephales promelas, 33 d): 0,26 mg/l (OECD 210) Lowest Observed Effect Concentration (Pimephales promelas, 33 d): 0,54 mg/l (OECD 210)

Aquatic Invertebrates

Product:	No data available.
Components:	
Butyl acetate	No data available.
2-methoxy-1-methylethyl acetate	NOEC (Daphnia magna, 21 d): 100 mg/l (OECD 211) EC 50 (Daphnia magna, 21 d): > 100 mg/l (OECD 211)
decan-1-ol	EC 10 (Daphnia magna, 21 d): 210 µg/l (OECD 211) NOEC (Daphnia magna, 21 d): 110 µg/l (OECD 211)

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
Butyl acetate	NOEC (Desmodesmus subspicatus (green algae), 72 h): 200 mg/l growth rate
2-methoxy-1-methylethyl acetate	NOEC (Algae (Pseudokirchneriella subcapitata), 96 h): 1.000 mg/l (OECD 201)
decan-1-ol	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
Butyl acetate	IC 50 (Tetrahymena pyriformis, 40 h): 356 mg/l
2-methoxy-1-methylethyl acetate	EC 10 (activated sludge, 0,5 h): > 1.000 mg/l (OECD 209)
decan-1-ol	EC0 (Pseudomonas putida, 30 min): 10.000 mg/l EC 50 (Pseudomonas putida, 3 h): > 100 mg/l (OECD 209)

Persistence and Degradability

Biodegradation

Product:	No data available.
Components:	
Butyl acetate	83 % (28 d, OECD 301 D) The product is easily biodegradable., aerobic

2-methoxy-1-methylethyl acetate 83 % (28 d, OECD 301 F) The product is easily biodegradable., aerobic

decan-1-ol 82 % (28 d, OECD 301 B) The product is easily biodegradable., aerobic

BOD/COD Ratio

Product: No data available.

Components:

Butyl acetate No data available.

2-methoxy-1-methylethyl acetate No data available.

decan-1-ol No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:

Butyl acetate No data available.

2-methoxy-1-methylethyl acetate No data available.

decan-1-ol Does not significantly accumulate in organisms.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: not measured

Components:

Butyl acetate Log Kow: 2,3 (OECD 117)

2-methoxy-1-methylethyl acetate No data available.

decan-1-ol Log Kow: 4,5 25 °C (OECD 117)

Mobility in soil:

Product No data available.

Components:

Butyl acetate No data available.

2-methoxy-1-methylethyl acetate No data available.

decan-1-ol No data available.

Product No data available.

Components:

Butyl acetate No data available.

2-methoxy-1-methylethyl acetate No data available.

decan-1-ol 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**International Regulations****IATA-DGR**

UN/ID No.	: UN 1993
Proper shipping name	: Flammable liquid, n.o.s. (Butyl acetates, 2-methoxy-1-methylethyl acetate)
Class	: 3
Packing group	: III
Labels	: 3
Packing instruction (cargo aircraft)	: 366
Packing instruction (passenger aircraft)	: 355

IMDG-Code

UN number or ID number	: UN 1993
Proper shipping name	: FLAMMABLE LIQUID, N.O.S. (Butyl acetates, 2-methoxy-1-methylethyl acetate)
Class	: 3
Packing group	: III
Labels	: 3
EmS Code	: F-E, <u>S-E</u>
Marine pollutant	: no
Remarks	: Stowage category A

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**16. Other information, including date of preparation or last revision**

Issue Date: 04.03.2019

Version #: 1.1

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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