

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: TEGO® Rad 2700

Chemical name:
Acrylated Polysiloxanes

Other means of identification

CAS Number: 157811-87-5

Recommended restrictions

Recommended use: Industrial use
Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
Nutrition & Care
PO Box 34628
Richmond, VA 23234
USA

Telephone : +1 804 727 0700

Fax : +1 804 727 0845

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

Health Hazards

Serious Eye Damage/Eye Irritation	Category 2A
Skin sensitizer	Category 1

Label Elements

Hazard Symbol:



Signal Word: Warning

Hazard Statement:

Causes serious eye irritation.
 May cause an allergic skin reaction.

Precautionary Statements
Prevention:

Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace.

Response:

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. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see on this label). Wash contaminated clothing before reuse.

Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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

3. Composition/information on ingredients

Chemical name:

Acrylated Polysiloxanes
Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Siloxanes and Silicones, di-Me, hydrogen-terminated, reaction products with 2,2-bis[[[1-oxo-2-propenyl)oxy)methyl]-1,3-propanediyl d		157811-87-5	50 - <100%
Dicarbonyl(pentane-2,4-dionato-O,O')rhodium		14874-82-9	0 - <0.1%

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

Composition information of impurities and stabilizers

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
2,2-Bis[[[1-oxoallyl)oxy)methyl]-1,3-propanediyl diacrylate		4986-89-4	1 - <5%
isobutanol		78-83-1	0.1 - <1%
phenothiazine		92-84-2	0 - <0.1%

^{*} 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 with soap and 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
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 monoxide, carbon dioxide, silicon dioxide 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: No specific precautions.

Special protective equipment for fire-fighters: Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus and wear protective suit

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.

Accidental release measures: No data available.

Methods and material for containment and cleaning up:

Pick up with absorbent material. 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):

Good general (mechanical) ventilation should be sufficient to control airborne levels.

Safe handling advice:

Provide good ventilation of working area (local exhaust ventilation if necessary). Do not inhale gases/vapours/aerosols. Avoid contact with skin and eyes.

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. Homogenise before using. Keep away from heat.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Hazardous components without workplace control parameters

Chemical Identity	Type	Exposure Limit Values	Source
isobutanol	TWA	50 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	REL	50 ppm 150 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	PEL	100 ppm 300 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (03 2016)
phenothiazine	TWA	5 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2016)
	REL	5 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	5 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
	TWA PEL	5 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (01 2015)
Dicarbonyl(pentane-2,4-dionato-O,O')rhodium - as Rh	TWA	1 mg/m ³	US. ACGIH Threshold Limit Values, as amended (03 2016)
Dicarbonyl(pentane-2,4-dionato-O,O')rhodium - Fume. - as Rh	REL	0.1 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2010)
Dicarbonyl(pentane-2,4-dionato-O,O')rhodium - as Rh	PEL	0.1 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as

			amended (03 2016)
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Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

Good general (mechanical) ventilation should be sufficient to control airborne levels.

Individual protection measures, such as personal protective equipment

Eye/face protection:

Safety glasses

Skin Protection

Hand Protection:

Material: Nitrile rubber.
 Break-through time: 480 min
 Material: Natural rubber.
 Break-through time: 480 min
 Material: Chloroprene
 Break-through time: 480 min
 Material: Butyl rubber.
 Break-through time: 480 min

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:

Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately. Use skin protective preparation as preventive skin protection.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Form:	Viscous Liquid
Color:	cloudy
Odor:	Characteristic
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:	> 212 °F/> 100 °C (DIN EN 22719)

Self Ignition Temperature:	not measured
Decomposition Temperature:	not measured
pH:	Not applicable
Viscosity	
Dynamic viscosity:	800 - 2,500 mPa.s (77 °F/25 °C, DIN 53019)
Kinematic viscosity:	769 - 2404 mm ² /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:	Approximate 1.04 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:	Heat. direct sunlight
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 401) The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Not irritating OECD 404 (Rabbit, 4 h): Not irritating; The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Serious Eye Damage/Eye Irritation

Product: Irritating. Rabbit: Irritating. The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

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), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

No data available.

In vitro

Product: Bacterial reverse mutation assay (OECD 471): negative; Own study;

In vivo

Product: No data available.

Components:

phenothiazine Chromosomal aberration Oral (Rat, Male): negative

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

Information on health hazards

Other hazards

Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Components:

isobutanol	EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 632 mg/l (OECD 201) Literature EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 1,799 mg/l (OECD 201)
phenothiazine	EC 50 (Desmodesmus subspicatus (green algae), 72 h): 0.74 mg/l (OECD 201)
Dicarbonyl(pentane-2,4-dionato-O,O')rhodium	EC 50 (Algae (Pseudokirchneriella subcapitata), 48 h): 18.3 mg/l (OECD 201)

Toxicity to microorganisms

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.

Components:

isobutanol	NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 53 mg/l (OECD 201) Literature
phenothiazine	NOEC (Desmodesmus subspicatus (green algae), 72 h): 0.66 mg/l (OECD 201)

Toxicity to microorganisms

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:

Product No data available.

Results of PBT and vPvB assessment:

Product No data available.

Other adverse effects:

Other hazards

Product: Do not allow to enter soil, waterways or waste water canal. Based on expert judgement and on experimental data within an analogue approach, the maximum estimated aqueous concentration of typical impurities of siloxane polymers, migrating into water is below their established no-effect threshold value for aquatic organisms.

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), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity

1-PROPANOL, 2-METHYL-

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Serious eye damage or eye irritation, Respiratory or Skin Sensitization

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

US. EPCRA (SARA Title III Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

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

None present or none present in regulated quantities.

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

No ingredient requiring a warning under CA Prop 65.

Inventory Status:

US TSCA Inventory:	Included on Inventory.	
Canada NDSL Inventory:	Included on Inventory.	Evonik has submitted a non-Final NSN (New Substance Notification) for this substance.

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

HMIS Hazard ID

Health	2
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

Issue Date: 03/13/2019

Version #: 1.2

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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