

SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: TEGO® Rad 2650

Chemical name:

Acrylated polysiloxane

Other means of identification

None.

Recommended restrictions

Recommended use: Industrial use

Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Company Name : Evonik Corporation
Nutrition & Care
7801 Whitepine Road
Richmond, VA 23237
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

Toxic to reproduction

Category 2

Label Elements

Hazard Symbol:



| | |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signal Word: | Warning |
| Hazard Statement: | Suspected of damaging fertility. |
| Precautionary Statements | |
| Prevention: | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. |
| Response: | IF exposed or concerned: Get medical advice/attention. |
| Storage: | Store locked up. |
| Disposal: | Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations. |
| Hazard(s) not otherwise classified (HNOC): | None. |

3. Composition/information on ingredients

Chemical name:
 Acrylated polysiloxane
Substances

Composition information of impurities and stabilizers

| Chemical Identity | Common name and synonyms | CAS number | Content in percent (%) [*] |
|------------------------------|--------------------------|------------|-------------------------------------|
| octamethylcyclotetrasiloxane | | 556-67-2 | 0.01 - <0.25% |

^{*} 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 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 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: Up to now no symptoms are known.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

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 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. Ensure adequate ventilation.

Accidental release measures: No data available.

Methods and material for containment and cleaning up: Take up with absorbent material (eg sand, diatomaceous earth, universal binder) 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: Installation of an appropriate extraction system is necessary:
- on the coater head if aerosol formation (misting) of the

liquid silicone is observed - at the end of the UV chamber to remove most of the nitrogen gas (free radical curing silicones only), ozone and potential volatiles from the coating material. - when converting cured silicone at temperatures above 120°C - e.g. embossing and hotmelt coating - to remove potentially outgassing components. Short term: filter apparatus, combination filter A-P2

Local/Total ventilation:

No data available.

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. If vapours / aerosols are generated during processing, local extraction at the processing machines is recommended. Do not inhale aerosols/ vapours/ gases as they are hazardous.

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. Do not store together with oxidizing agents. Maximum storage temperature: 30 °C

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Biological Limit Values

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

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment (PPE)

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:

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

Information on basic physical and chemical properties

Appearance

Physical state: liquid

Form: liquid

Color: Amber

Odor: faint inherent odor

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: 262 °F/128 °C
Method: DIN EN 22719

Auto-ignition temperature: 806 °F/430 °C

Decomposition Temperature: not measured

pH: not measured

Viscosity

Dynamic viscosity: 300 - 600 mPa.s at 77 °F/25 °C
Method: DIN 53015

Kinematic viscosity: 300 - 600 mm²/s at 77 °F/25 °C ,
Method: calculated

Flow Time: No data available.

Solubility(ies)

Solubility in Water: not measured

Solubility (other): not measured

Partition coefficient (n-octanol/water): not measured

Vapor pressure: not measured

Relative density: not measured

Density: Approximate
1 g/cm³ at 77 °F/25 °C
Method: DIN 51757

Bulk density: No data available.

Relative vapor density: not measured

Other information

| | |
|------------------------------|-------------------------|
| Explosive properties: | not measured |
| Oxidizing properties: | not oxidizing |
| Self-ignition: | 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: | Risk of polymerisation. |
| Conditions to avoid: | Open flames, sparks or input of much heat direct sunlight |
| Incompatible Materials: | Oxidizing agents. |
| Hazardous Decomposition Products: | None with proper storage and handling. |

11. Toxicological information

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 |
|-----------------|---------------------------|

Dermal

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Inhalation

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Repeated dose toxicity

| | |
|-----------------|--------------------|
| Product: | No data available. |
|-----------------|--------------------|

Skin Corrosion/Irritation

| | |
|-----------------|--------------------------------|
| Product: | Not irritating, Not irritating |
|-----------------|--------------------------------|

Serious Eye Damage/Eye Irritation

| | |
|-----------------|--------------------------------|
| Product: | Not irritating, Not irritating |
|-----------------|--------------------------------|

Respiratory or Skin Sensitization

| | |
|-----------------|----------------------------------------------------------------------|
| Product: | Magnussona i Kligmana., OECD 406, Guinea Pig, Not a skin sensitizer. |
|-----------------|----------------------------------------------------------------------|

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

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 1910.1001-1053), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

No data available.

In vitro

Product: No data available.

Components:

octamethylcyclotetrasiloxane
Ames test, OECD 471: , negative
Chromosomal aberration, OECD 473: , negative
gene mutation test, OECD 476: , negative

In vivo

Product: No data available.

Components:

octamethylcyclotetrasiloxane
Micronucleus test, OECD 474, Inhalation - vapor, Rat, negative
Chromosomal aberration, OECD 478, Oral, Rat, negative
Chromosomal aberration, OECD 475, Inhalation - vapor, Rat, Female, 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:

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 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 K_{ow})

Product: , 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 (on the basis of current knowledge of the product composition).

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 (on the basis of current knowledge of the product composition).

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Reproductive toxicity

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

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

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

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

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

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

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

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

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 DSL Inventory List: | Included on Inventory. |

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

HMIS Hazard ID

| | |
|----------------------------|---|
| Health | 1 |
| Flammability | 1 |
| Physical Hazards | 0 |
| PERSONAL PROTECTION | B |

B - Safety Glasses & Gloves

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

Version #: 3.1

Generation date: 10/29/2024

Date of first report version: 03/13/2019

Abbreviations and acronyms:

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical

Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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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