

January 26, 2021

TEGO® Rad 2300

Food Contact Information

EU: Regulation 10/2011

BfR Recommendation XIV

China: GB 9685 – 2016

Mercosur: MERCOSUR/GMC/RES No 39/19 and MERCOSUR/GMC/RES No 02/12

TEGO® Rad 2300 is not in compliance with the above mentioned regulations.

Switzerland: SR 817.023.21

TEGO® Rad 2300 is in compliance with the “Ordinance of the FDHA on Materials and Articles (SR 817.023.21)” – status 1 December 2019. All components (additives and / or monomers) are listed in Annex 10 in the lists for not evaluated (B) substances.

Please note that the 10 ppb Migration Limit applies.

USA: FDA

TEGO® Rad 2300 may be used in compliance with FDA 21 CFR 175.105, if used up to max. 7880 mg/sqm and if the adhesive is separated from the food by a functional barrier.

Japan: Japanese Positive List (PL) for Direct Food Contact

All components of TEGO® Rad 2300 are listed on the Japan Positive List as additive. For detailed information of the approved food categories, usage levels and other requirements please contact us.

EUPIA EXCLUSION LIST FOR PRINTING INKS AND RELATED PRODUCTS

Selection Criteria A and B: Please refer to Safety Data Sheet (Chapter 3).

We would like to confirm that we do not expect the presence of substances listed in the EUPIA “Exclusion List for Printing Inks and Related Products”, 3rd edition

(November 2016) in Selection Criteria C and Substances Lists D to G (listed substances in the table) in TEGO® Rad 2300.

| Substances |
|--|
| <p>Pigments and substances based on:</p> <ul style="list-style-type: none"> • Antimony • Arsenic • Cadmium • Chromium (VI) • Lead • Mercury • Selenium |
| <p>Pigment colourants:</p> <ul style="list-style-type: none"> • Auramin (Basic Yellow 2 – CI 41000) • Chrysoidin (Basic Orange 2 – CI 11270) • Fuchsin (Basic Violet 14 – CI 42510) • Indulin (Solvent Blue 7 – CI 50400) • Kresylen (Basic Brown 4 – CI 21010) |
| <p>Solvents:</p> <ul style="list-style-type: none"> • 2-Methoxyethanol 109-86-4 • 2-Methoxyethyl acetate 110-49-6 • 2-Ethoxyethyl acetate 111-15-9 • Monochlorobenzene • Dichlorobenzene • Volatile chlorinated hydrocarbons, such as trichloroethylene, perchlorethylene and methylenechloride • Volatile fluorochlorinated hydrocarbons • 2-Nitropropane • Methanol |
| <p>Plasticisers:</p> <ul style="list-style-type: none"> • Chlorinated naphthalenes • Chlorinated paraffins • Monocresyl phosphate • Tricresyl phosphate • Monocresyl diphenyl phosphate |
| <p>Various Compounds:</p> <ul style="list-style-type: none"> • Diaminostilbene and derivatives • 2,4-Dimethyl-6-tertiary-butylphenol • 4,4 Tetramethyldiaminobenzophenone (Michler's Ketone) • Hexachlorocyclohexane |

Nestlé Guidance Note on Packaging Inks (2018)

We do not expect the presence of following substances within TEGO® Rad 2300:

General exclusions

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|--|
| Titanium Acetyl Acetonate (TAA) |
| <i>Ortho</i> -Phthalate plasticizers |
| Bisphenol A (BPA) and materials manufactured from or incorporating BPA in reacted form as part of the chemical structure |
| Nitrocellulose resins |
| Vegetable oils/fatty acid esters with strong odours |
| Heavy/Toxic metal in amounts exceeding the respective limits mentioned in the Swiss ordinance |
| Solvents and other chemicals which give off-odour or taint to the food |

Odour: Specific to the product

Table 1: Exclusion list for pigments

| Pigments | Color index | CAS number | Swiss Ordinance |
|-------------------|-------------|-------------------------|-----------------|
| Pigment Red 81 | 45160:1 | 12224-98-5 | B |
| Pigment Red 81:1 | 45160:3 | 80083-40-5 | B |
| Pigment Red 81:2 | 45161:1 | 75627-12-2 | B |
| Pigment Red 81:3 | 45161:2 | 68310-07-6 | B |
| Pigment Red 81:5 | 45160:4 | 63022-06-0 | B |
| Pigment Red 169 | 45160:2 | 12224-98-5 | B |
| Pigment Green 1 | 42040:1 | 1325-75-3 | B |
| Pigment Blue 1 | 42595.2 | 1325-87-7 | B |
| Pigment Blue 62 | 44084 | 57485-98-0 | B |
| Pigment Violet 1 | 45170:2 | 1326-03-0 | B |
| Pigment Violet 2 | 45175:1 | 1326-04-1 | B |
| Pigment Violet 3 | 42535:2 | 1325-82-2 67989-22-4 | B |
| Pigment Violet 27 | 42535:3 | 12237-62-6 | B |
| Pigment Violet 39 | 42555:2 | 64070-98-0 | B |

Table 2: Exclusion list for Photo-Initiators

| PI Name | CAS Number | Swiss Ordinance |
|----------------------------------|------------|-----------------|
| 2-Hydroxy 2-methyl propiophenone | 7473-98-5 | B |
| 2-(Dimethylamino)ethyl benzoate | 2208-05-1 | B |
| - Benzophenone | 119-61-9 | A |
| - 2-Methyl benzophenone | 131-58-8 | A |
| - 4-Methyl benzophenone | 134-84-9 | A |
| - 2,4,6-trimethylbenzo- phenone | 954-16-5 | B |

| | | |
|--|------------|---|
| 1-Hydroxycyclohexyl phenylketone | 947-19-3 | B |
| 2,2-Dimethoxy 2-phenyl acetophenone | 24650-42-8 | B |
| 2-Methyl 4'-(methylthio) 2-morpholinopropiophenone | 71868-10-5 | B |
| - 4-Isopropyl 9H-thioxanthen-9-one | 83846-86-0 | A |
| - 2-Isopropyl 9H-thioxanthen-9-one | 5495-84-1 | A |
| 2,4-Diethyl 9H-thioxanthen-9-one | 82799-44-8 | B |
| Diphenyl (2,4,6-trimethyl benzoyl) phosphine oxide | 75980-60-8 | A |

Table 3: Minimize list for Photo-Initiators

| PI Name | CAS Number | Swiss Ordinance |
|--|-------------|-----------------|
| Irgacure | 119313-12-1 | A |
| Other monomeric Benzophenones (not forbidden above) benzoate | various | A / B |

Table 4: Exclusion list for acrylates

| Chemical name | CAS number | Swiss Ordinance |
|--------------------------------------|------------|-----------------|
| Butanediol Diacrylate (BDDA) | 1070-70-8 | B |
| Diethylene glycol diacrylate (DEGDA) | 4074-88-8 | B |
| Isodecyl acrylate (IDA) | 1330-61-6 | B |
| Octyl acrylate (ODA) | 2499-59-4 | A |
| Phenoxy ethyl acrylate | 48145-04-6 | B |

Table 5: Minimize list for acrylates

| Chemical name | CAS number | Swiss Ordinance |
|---|------------|-----------------|
| Trimethylol propane triacrylate (TMPTA) | 15625-89-5 | B |
| Dipropylene glycol diacrylate (DPGDA) | 57472-68-1 | B |
| 1, 6-Hexanediol diacrylate (HDDA) | 13048-33-4 | B |
| 2-Ethyl hexyl acrylate (2EHA) | 103-11-7 | A |
| Mixtures of pentaerythritol tri- and tetra-acrylates (PETA) | 3524-68-3 | B |
| Tetraethylene glycol diacrylate (TEGDA) | 17831-71-9 | B |

Table 6: Exclusion list for solvents

| Chemical name | CAS number | Swiss Ordinance |
|----------------------------------|------------|-----------------|
| 2-Methoxyethanol (methyl glycol) | 109-86-4 | A |
| 2-Ethoxyethanol (Ethyl glycol) | 110-80-5 | A |
| Monochlorobenzene | 108-90-7 | A |

| | | |
|------------------------|----------|---|
| Toluene | 108-88-3 | A |
| 1-methyl-2-pyrrolidone | 872-50-4 | A |

Table 7: Minimize list for solvents

| Chemical name | CAS number | Swiss Ordinance |
|-----------------------------|------------|-----------------|
| Methanol | 67-56-1 | A |
| Cyclohexane | 110-82-7 | A |
| Methylethylketone (MEK) | 78-93-3 | A |
| Methylisobutylketone (MiBK) | 108-10-1 | A |
| Hexanol | 111-27-3 | A |
| 2-Ethyl-1-hexanol | 104-76-7 | A |
| n-Octanol | 111-87-5 | A |
| Butylglycol | 111-76-2 | A |
| Butyldiglycol | 112-34-5 | A |
| Ethyldiglycol | 111-90-0 | A |
| Hexyleneglycol | 107-41-5 | A |
| Butoxypropanol | 5131-66-8 | A |
| Butoxypropoxypropanol | 29911-28-2 | A |
| Ethandiol | 107-21-1 | A |
| Diethyleneglycol | 111-46-6 | A |
| Triethyleneglycol | 112-27-6 | A |
| Butylglycolacetate | 112-07-2 | A |
| 1-Methoxy-2-propylacetate | 108-65-6 | A |
| Ethylbenzene | 100-41-4 | A |
| 1-Pentanol | 71-41-0 | A |

Finished food contact materials or articles containing this product as a component, need to comply inter alia with Overall Migration Limit (OML) requirements – as specified in the regulations. Verification of compliance with migration limits (OML and SML) should be carried out in accordance with the rules laid down there. We would like to point out that it is in the sole responsibility of the manufacturer of the final material or article to assure the compliance with the OML/SML requirements under actual and foreseeable conditions of use, and to check it on a regular basis. The manufacturer of food contact materials or articles, containing this product as a component, must in particular ascertain that these finished materials or articles meet the general regulatory requirement that they do not endanger human health, or bring about an unacceptable change in the composition of the food or deterioration in the organoleptic characteristics thereof.

The information given above is based on and represents our current compositional knowledge (based on the knowledge of the production process, supplier information for raw materials and analytical data where applicable).

In case of provided values these are considered to be typical concentrations and are not part of product specification.

All provided information is based on our present knowledge and experience and is true and complete to the best of our knowledge and belief. However, no warranty, whether expressed or implied, or guarantee of product properties in the legal sense is intended or implied.

In case of any questions concerning the provided information or if you need additional advice you are welcome to contact us:

Evonik Operations GmbH
Goldschmidtstraße 100
45127 Essen
Germany
www.evonik.de
www.coating-additives.com

Please contact for region Europe, Middle East, Russia and Afrika
regulatory-coating-additives-europe@evonik.com

Please contact for region Americas
regulatory-coating-additives-americas@evonik.com

Please contact for region Asia, Australia and New Zealand
regulatory-coating-additives-asia@evonik.com