





Mactac Regulatory Status

Roll Label Products HR-51 ADHESIVE

This Regulatory Bulletin covers Mactac Roll Label Products using HR-51 adhesive

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Product Identification

Product Classification

All Mactac Roll Label products are considered **Articles** as defined by the Federal Occupational Safety and Health Administration (OSHA).

According to the OSHA's Hazard Communication Standard (29 CFR 1910.1200 (c):

Article means a manufactured item other than a fluid or particle:

- (i) which is formed to a specific shape or design during manufacture.
- (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and
- (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical and does not pose a physical hazard or health risk to employees.

SDS

According to 29 C.F.R. 1910.1200 (b)(6)(V), the section 1910.1200 - Hazard Communication does not apply to articles. Consequently, as articles, Mactac Roll Label products are exempt from the Safety Data Sheets (SDS) provisions of 29 C.F.R. 1910.1200(g)(6).

US Regulation

FDA Status

The adhesives of Mactac Roll Label products coated with HR-51 acrylic adhesive comply with 21 CFR 175.105 – Adhesives. Compliance with this section requires the adhesive is either separated from food by a functional barrier or used subject to the following limitations:

- In dry food. The quantity of adhesive that contacts packaged dry food shall not exceed the limits of good manufacturing practice.
- In fatty and aqueous food. The quantity of adhesive that contacts packaged fatty and aqueous food shall not exceed the trace amount at seams and at the edge exposure between packaging laminates that may occur within the limits of good manufacturing practice.

The end-user is responsible for determining the applicability of FDA requirements for the intended use(s).

Allergens

Mactac Roll Label products coated with HR-51 acrylic adhesive are not intentionally formulated to contain the following foods that are known to be allergens, as defined in the US Food Allergen Labeling and Consumer Protection Act of 2004:

- Milk
- Eggs
- Fish
- Crustacean shellfish
- Tree nuts
- Peanuts
- Wheat
- Soybeans
- Sesame

Chemical Substances Undergoing Prioritization: High Priority

Acrylic Emulsion adhesives do not contain any of the twenty chemicals undergoing evaluation as High Priority under TSCA.

Volatile Organic Compounds (VOC's)

Mactac Roll Label products coated with HR-51 acrylic adhesive are coated from water-based emulsion. No solvents are used. Any residual monomers are expected to be substantially removed during the coating and drying processes. Mactac does not routinely test for VOC's.

Toxic Substances Control Act (TSCA) Restricted Substance Declaration

The United States Toxic Substances Control Act (TSCA) is a federal chemicals management regulation. Under TSCA Section 6, certain substances, and substance families (including treated articles containing these substances) are restricted from distribution in U.S. commerce, including:

- Asbestos
- Lead, when used in paint*
- Polychlorinated biphenyls (PCBs)
- Dioxins
- Chlorofluorocarbons (CFCs, ozone depleting substances)
- Metallic mercury, when used in consumer products
- Formaldehyde, when used in composite wood products*
- Nitrites, when used in certain cutting fluids*
- Hexavalent chromium compounds, when used in water treatment*
- Five Persistent, Bioaccumulative, and Toxic substances restricted in 2021:
 - o PIP 3:1 (CAS 68937-41-7)
 - o DecaBDE (CAS 1163-19-5)
 - o 2,4,6 TTBP (CAS 732-26-3)
 - o HCBD (CAS 87-68-3)
 - o PCTP (CAS 133-49-3)

Based on supplier information, formulation, and manufacturing practices, Mactac Roll Label products coated with HR-51 acrylic adhesive are not manufactured with the addition of the above listed chemicals.

Consumer Product Safety Improvement Act (CPSIA)

Under the chemical substance requirements set forth in the Consumer Product Safety Improvement Act of 2008 ("CPSIA"), the presence of heavy metals in substrates are restricted in all children's products. In addition, the phthalates denominated as DEHP, DBP, BBP, DINP, DIDP, and DNOP are restricted in toys for children and childcare articles.

Based on supplier information, formulation and manufacturing process, Mactac Roll Label products coated with HR-51 acrylic adhesive meet the safety requirements for lead and phthalates in Consumer Product Safety Improvement Act (CPSIA) of 2008 for children's products.

^{*}Not applicable to Mactac products

State of California Safe Drinking Water and Toxic Enforcement Act of 1986 - Prop 65

Proposition 65 requires businesses to provide warnings to Californians about significant exposures to chemicals that cause cancer, birth defects or other reproductive harm.

Mactac Roll Label products coated with HR-51 acrylic adhesive comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986, commonly known as Proposition 65. A warning label is not required on the basis that there is no exposure to any Proposition 65 substances in known applications.

Bisphenol S - BPS

The chemical dioxydiphenylsulfone also known as **Bisphenol S or BPS (CAS#80-09-1)**, was added to the Proposition 65 list in December 2023. This chemical is known to be present in the non-top coated direct thermal papers utilized in the MACTAC products DTNN, LLT-DTNN, DTTC, DTNXR and DTNHXR (without the identifier NB). However, these products containing BPS are being discontinued from Mactac's portfolio.

Mactac products *Simply DT Direct Thermal* identified with NB are not manufactured with added bisphenols, including BPS. For more information access <u>Mactac | Simply DT™</u>.

Mactac complies with regulatory labeling requirements for Prop 65.

Toxics in Packaging Clearinghouse (TPCH)

Mactac does not intentionally add the following heavy metals (or their compounds): cadmium, hexavalent chromium, lead, mercury, as well as phthalates and perfluoroalkyl and polyfluoroalkyl substances (PFAS) to any of the Roll Label products, as defined on the 2021 Toxic in Packaging Clearinghouse (TPCH) update. Mactac does not specifically analyze the products for the presence of these substances. Based on our knowledge of the raw materials and the manufacturing process, the sum of any trace quantities of lead, mercury, cadmium, and hexavalent chromium is below legislation limit of 100 ppm.

EU Regulations

REACH - Substances of Very High Concern (SVHC)

Mactac Roll Label products coated with HR-51 acrylic adhesive are classified as "articles" per European Union Regulation (EC) No. 1907/2006 and are not articles with an intended release of a chemical substance. They are exempt from the registration requirements.

These articles do not contain intentionally added Substance of Very High Concerned (SVHC) as published by the European Chemicals Agency (ECHA) on June 25th, 2025, under the provisions of Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) in concentration exceeding 0.1% w/w.

SCIP - Substances of Concern In articles as such or in complex objects (Products)

SCIP is the database for information on **S**ubstances of **C**oncern **I**n articles as such or in complex objects (**P**roducts) established under the Waste Framework Directive (WFD).

To ensure compliance with SCIP, Companies supplying articles containing substances of very high concern (SVHCs) on the Candidate List in a concentration above 0.1% weight by weight (w/w) on the EU market have to submit information on these articles to ECHA.

Refer to REACH-SVHC statement above for SCIP compliance.

Restriction of Hazardous Substances in Electrical and Electronic Equipment - RoHS (1, 2 & 3)

Mactac Roll Label products coated with HR-51 acrylic adhesive are in compliance with concentration values listed in European Commission Directive 2002/95/EC and Annex II of Directive 2011/65/EU (RoHS 2) and (EU) 2015/863 restricting the use of certain hazardous substances in each of the homogeneous material in electrical and electronic equipment (EEE) as follows:

- •Less than 0.1% by weight for lead, mercury and hexavalent chromium
- •Less than 0.1% by weight for polybromo biphenyls (PBB) and polybrominated biphenyl ethers (PBDE)
- •Less than 0.01% by weight for cadmium
- •Less than 0.1% by weight for bis (2-ethylhexyl phthalate (DEHP), benzyl butyl phthalate (BBP), dibutyl phthalate (DBP), diisobutyl phthalate (DIBP)

Mactac Roll Label products coated with HR-51 acrylic adhesive also comply with the chemical requirements of China RoHS.

Persistent organic pollutants (POPs)

Mactac products do not contain intentionally added Persistent organic pollutants (POPs) according to the **Regulations (EU) No 2019/1021 and (EU) No 2023/1006 of the European Parliament** on persistent organic pollutants (POPs Regulation).

EU Packaging Directive – EU 94/62/EC

Mactac has conducted recyclability testing on certain products. All recyclability information is available to review through the Mactac Simply Sustainable website: https://www.mactac.com/Simplysustainable.

All Mactac products with a paper or PET liner, the liner is considered fully recyclable with liner recycling solutions provided through CELAB Europe or TLMI in the US.

Mactac does not intentionally add the following heavy metals (or their compounds): cadmium, hexavalent chromium, lead, mercury. Based on our knowledge of the raw materials and the manufacturing process, the sum of any trace quantities of lead, mercury, cadmium, and hexavalent chromium is below legislation limit of 100 ppm.

Conflict Minerals

Mactac Roll Label products coated with HR-51 acrylic adhesive do not contain Conflict Minerals (columbite-tantalite, cassiterite, wolframite, and gold as identified in Public Law 111-203) and their derivatives (tantalum, tin, and tungsten), as enumerated in 77 Federal Register 56273 and 56285).

Extended Mineral Reporting – Mica and Cobalt

Based on supplier information, formulation, and manufacturing practices Mica and Cobalt are not used as components, nor are added to the manufacturing process or to Mactac Roll Label products coated with HR-51 acrylic adhesive .

TSE/BSE

Mactac products manufactured using acrylic adhesives, such as HR-51, do not contain Animal Derived Materials.

Per- and polyfluoroalkyl (PFAS) and PFOS (Perfluorooctanesulfonic) substances

Several U.S. states have adopted varying laws prohibiting the manufacture, known distribution, or sale of products containing intentionally added perfluoroalkyl and polyfluoroalkyl substances (PFAS)

Based on supplier information, formulation, and manufacturing practices, Mactac Roll Label products coated with HR-51 acrylic adhesive do not contain intentionally added Organic Fluorine Compounds including PFAS (Per- and polyfluoroalkyl) and PFOS (Perfluorooctanesulfonic) substances.

Mineral Oil

Mineral oil hydrocarbons (MOH) consist of two fractions, mineral oil saturated hydrocarbons (MOSH) and mineral oil aromatic hydrocarbons (MOAH).

Mactac Products utilizing Acrylic Emulsion Adhesives:

Mactac's adhesive HR-51 contains mineral oils, however, due to the complexity of analytics and the limitations within the industry to evaluate specific content, Mactac cannot provide concentration of MOSH and MOAH in adhesives.

Substances of Concern

Based on supplier information, formulation and manufacturing process, the Substances of Concern listed below are not used as components, nor are added to the manufacturing process or to Mactac Roll Label products coated with HR-51 acrylic adhesive:

- Aromatic amines
- Asbestos or Crystalline Silica
- Azo Dyes
- Benzophenone
- BHT and BHA
- Bisphenol A (BPA)
- Bisphenol S (BPS)*
- Brominated Flame Retardants
- Chlorinated compounds (excluding products with vinyl face stocks)
- Dimethyl Fumarate
- Dioxins
- Epoxy Derivatives
- ESP Expanded Polystyrene
- Food Materials or Food Allergens
- Melamine
- Nanomaterial
- Natural Rubber or Natural Rubber Latex
- Ozone Depleting Substances
- Phosphorus- based flame retardant
- Phthalate Plasticizers, including DEHP, DINP, DIDP, DnOP, DnHP, BBP, DBP, DIBP, DCHP
- Polychlorinated Biphenyls (PCBs)
- Poly Vinyl Chloride PVC (excluding products with vinyl face stocks)
- Short-chained Chlorinated Paraffins (SCCP)
- Tri Nonyl Phenyl Phosphite (TNPP)

DISCLAIMER:

This Regulatory Bulletin has been prepared by Mactac NA for general information only. It is meant to answer the most common regulatory questions. Regulations, status, and standards will evolve and Mactac will update this document on a regular basis. The determination of the suitability of the final use of the products is the sole responsibility of the customer. Mactac does not perform tests, nor does it require its suppliers to carry out testing. Information on this Regulatory Bulletin is based on supplier information, formulation, and manufacturing practices. For more Regulatory information, please contact your Mactac sales representative or our regulatory team at res-377-regulatoryrequests@mactac.com

^{*}Refer to page 6 - Bisphenol S