VERSENE™ 100 LN Chelating Agent

Global Inventories

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<th>Country</th>
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</table>

This product is not subject to any requirements under any order or rule under Toxic Substances Control Act (TSCA) Sections 4, 5, 6, 7, or 8(d) or 12(b).

General Statements

Product Composition

For information on the components of our product(s) and their concentration, please refer to the Material Safety Data Sheet (MSDS) and the Sales Specification. Any hazardous constituent above 1% (by weight) and carcinogens, mutagens, and reproductive toxins above 0.1% will appear in the ingredients section of the MSDS for this product. In addition, consult the Hazardous Decomposition Products section of the MSDS and the Sales Specification for further information.

Dow does not routinely analyze for additional materials that are not listed in the MSDS or Sales Specification. Specifically, we have not analyzed our chelating agents for the materials listed below, among others. These materials are not intentionally added, nor used in the manufacturing process, and therefore are not expected to be present in VERSENE™, VERSENEX™, and VERSENOL™ chelating agents.

Additives

- Aflatoxins
- Alkylphenol based products
- Aluminum and aluminum compounds
- Antimony
- Aromatic amines
- Arsenic and arsenic compounds
- Asbestos (all types)
- Azo colorants and dyes
- Bis-phenol A
- Butylated hydroxyanisole
- Butylated hydroxytoluene
- Carbon tetrachloride
- Carcinogenic substances classified as R45-R46-R49
Cadmium and cadmium compounds, applied in plastics and in metals and alloys
Cobalt
Chlorofluorocarbons (CFCs)
Chlorinated hydrocarbons (CHCs)
Chlorinated paraffins
Chromium VI
Cyanuric acid
1,4-Dioxane
Dichloromethane (CH2Cl2)
Dibutyl tin compounds
DBBT (monoethyl dibromodiphenyl methane)
Dimethyl fumarate
Endocrine disruptors
Halons
Hexavalent Chromium (Cr 6+) and compounds
Hydrobromofluorocarbons (HBFCs)
Hydrogenated chlorofluorocarbons (HCFCs)
Lead and lead-compounds
Methyl bromide
Mercury and mercury compounds
Melamine
Monobutyl tin compounds
Monomethyl dichlordiphenyl methane
Nanomaterials / Nanotechnology
Nickel and nickel compounds
NP (Nonylphenol) and NPE (Nonylphenol Ethoxylate)
Nonylphenol and ethoxylated nonylphenol
Organostannic compounds
Palm oil
Parabens
Paraffins
Pentachlorophenol (PCP)
Perchloroethylene (C2Cl4)
Pesticides
Petrochemicals
Phthalates
Poly brominated biphenyl (PBBs)
Poly brominated biphenyl ethers (PBBEs)
Poly chlorinated biphenyls (PCBs)
Poly chlorinated terphenyls (PCTs)
Preservatives
Quaternium 15
Salicylates
Short-chain chlorinated paraffins
Sulfates
Synthetic fragrances
TBBA (tetrabromobisphenol-A)
Tert-butylhydroquinone
Tetrachlorodiphenyl methane
Tetrachlorophenol
Tributyl tin compounds
1,1,1 Trichloroethane
Trichloroethylene (C2HCl3)
Trichlorophenol
Tris-(1-aziridinyl) phosphinoxide
Tris-(2,3-dibromo-propyl) phosphate
Whale oil and derivatives
Zinc

**Animal Derived Components (BSE/TSE)**
This product is not manufactured using materials that are derived from animal sources. Therefore, we can state that Bovine Spongiform Encephalopathy (BSE)/Transmissible Spongiform Encephalopathy (TSE) should not be a concern.

**Food Allergens**
This product has been evaluated for the source of the raw materials used in its production. There are no raw materials, including additives, used that have origin in corn or corn derivatives, eggs, fish, gluten, grapefruits, milk, mustard, peaches, peanuts, pork, royal jelly, sesame seeds, shellfish, soybeans, sulfur dioxide, sunflowers, tomatoes, tree nuts, wheat or buckwheat.

**Materials from Genetically Modified Organisms (GMO)**
This product is derived from petroleum and inorganic source materials. None of the ingredients are genetically modified.
Kosher Status
The Dow Chemical Company has not requested that this product be certified by a Kosher certifying agent. We have, however, reviewed the ingredients of this product and evaluated it against the Kosher requirements. This product is manufactured from synthetic raw materials derived from petroleum and electrolyzed brine sources. It contains no animal fats or byproducts, dairy components, nor does it contain any grains or grain alcohol. This chelating agent will comply with the acceptable guidelines of Kosher dietary laws.

Bisphenol A Content
This product, in the form as supplied by Dow, is not manufactured or formulated with Bisphenol A (CAS# 80-05-7).

Natural Rubber or Latex Content
The specification for this product has been reviewed for the origin of raw materials and specific ingredients. There is no "natural rubber" latex used in the manufacture or in the process for producing this product. The raw materials are derived from petroleum and its by-products and synthetic inorganic materials from brine. This is a synthetically produced product.

Phthalate Esters Content
For information on the components of our products and their concentration, please refer to the Material Safety Data Sheet (MSDS) and the Sales Specification.

Dow does not routinely analyze for additional materials that are not listed in the MSDS or Sales Specification. Phthalates are not intentionally added to Dow Chelating Agents. Therefore, these materials are not expected to be present in VERSENE™, VERSENEX™, and VERSENOL™ Chelating Agents.

Fluorotelomers, Perfluorooctanoic acid (PFOA) and Derivatives Content

The purpose of the Directive is to limit human and environmental exposure to PFOS, a bio-accumulative toxic substance present in consumer goods.

Within Directive 2006/122/EC, the European Parliament states that Perfluorooctanoic acid (PFOA) and its salts are suspected to have a similar risk profile to that of PFOS and that consequently the Commission will keep under review the ongoing risk assessment activities, as well as the availability of safer alternatives, with the aim of defining what kind of risk reduction measures, including restrictions on marketing and use, if appropriate, should be applied within the European Union.

We can confirm that the ingredients and the sources of these ingredients for this product have been researched for origin. This product is not manufactured using Perfluorooctane Sulfonates (PFOS) or Perfluorooctanoic acid (PFOA); therefore, neither PFOS nor PFOA is expected to be present in this material.

Halal
VERSENE™, VERSENEX™, and VERSENOL™ Chelating Agents are not certified as halal, but will comply with the halal dietary laws.
CMR

For information on the components of our product(s) and their concentration, please refer to the Material Safety Data Sheet (MSDS) and the Sales Specification. Any hazardous constituent above 1% (by weight) and carcinogens above 0.1% will appear in the ingredients section of the MSDS for these products. In addition, consult the Hazardous Decomposition Products section of the MSDS and the Sales Specification for further information.

Dow does not routinely analyze for additional materials that are not listed in the MSDS or Sales Specification. The Carcinogenic, Mutagenic or Toxic for Reproduction (CMR) Ingredients listed in Directive 76/768/EEC, as amended, are not intentionally added to this product with the following exceptions: Formaldehyde is used as a raw material for this product and residual formaldehyde may be present at levels below 0.1%. Nitrilotriacetate (NTA) is an unavoidable byproduct of the manufacture of this product. Unless noted on the MSDS, levels of NTA may be present below 0.1%.

Statements by Region

North America

Residual Volatile Organic Compounds U.S. (VOC)

With regard to Volatile Organic Compounds (VOC) content, one Environmental Protection Agency (EPA) definition of a VOC is any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate and excluding compounds which have negligible photochemical reactivity such as: ethane, methane, and also methylene chloride, perchloroethylene and acetone, which are Dow products. For other compounds, see 40 Code of Federal Regulations Section 51.100(s) and check for any recent Federal Register notices possibly exempting other negligibly reactive VOCs. Note: the water portion of a product, if present, is not considered a VOC. Since state or local governments and some specific EPA regulations may be more restrictive than the definition above, please check these sources also.

Under this broad definition, this product contains VOCs.

In some states, regulators have exempted VOCs with a vapor pressure less than 0.1 mm Hg at 20 degrees Centigrade from VOC content limitations for consumer and/or commercial products. Check local regulations to see if this is applicable. The calculated vapor pressure of tetrasodium EDTA at 20°C is 1.13 x 10^-08 mmHg. The calculated vapor pressure of EDTA Acid at 20°C is approximately 5 x 10^-13 mmHg.

The EPA has developed, and states may require, the use of EPA Method 24 to determine the percent VOC content of paints and coatings. This method was not developed for the analysis of individual ingredients. See the appropriate federal or state regulations for any other methods or procedures specified for determining VOC content.

The following data was generated for VERSENE™, VERSENEX™, and VERSENOL™ products using EPA Method 24:

- Pentasodium diethylenetriaminepentaacetate = 0 Wt% Volatility
- Tetrasodium ethylenediaminetetraacetate = 0 Wt% Volatility

Consumer Product Safety Improvement Act of 2008 (CPSIA)/Toy Safety

Dow does not routinely analyze for additional materials that are not listed in the MSDS or Sales Specification. Specifically, while we have not analyzed for heavy metals or phthalate content, they are not known to be present in this product. In regards to the ASTM F963 Toy Safety and U.S. Consumer Product Safety Improvement Act of 2008, it is the responsibility of the user to determine the appropriate regulatory requirement for their operation and/or final product use.

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Supersedes all versions prior to Effective Date
California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

Residual Solvents

This product is not routinely tested for Residual Solvent materials, per the current edition of The United States Pharmacopeia (USP)/National Formulary (NF). The Residual Solvents, listed as Class 1, 2, 3, and 4 in USP General Chapter <467> are not used in the production process and are not intentionally added or known to be present in packed and sealed product from Dow.

Hazardous Air Pollutants (HAPs)

The composition of this product, as supplied, was reviewed against the United States Environmental Protection Agency list of Hazardous Air Pollutants (40 CFR 61 and 40 CFR 63). Formaldehyde, which appears in the Hazardous Air Pollutant list is contained in this product at a concentration of less than or equal to 0.099 wt%. Please refer to Section 15 of the MSDS.

Europe

REACH Status


Residual Volatile Organic Compounds EU (VOC)

With regard to Volatile Organic Compounds (VOC) content, directive 1999/13/EC states that volatile organic compound (VOC) shall mean any organic compound having at 293.15°K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.

Since the vapour pressure of VERSENE chelating agents are contributed only by water, these products are considered to be 0% VOC at 293.15°K.

EU Directive 2011/65/EU (RoHS)

For information on the components of our products and their concentrations, please refer to the Material Safety Data Sheets (SDSs) and the Sales Specifications. Any hazardous constituent above 1% (by weight) and carcinogens above 0.1% will appear in the ingredients section of the MSDSs for these products. In addition, consult the Hazardous Decomposition Products section of the MSDSs and the Sales Specifications for further information.

Dow does not routinely analyze for additional materials that are not listed in the SDSs or Sales Specifications. Your inquiry addressed EU Directive 2011/65/EU, as amended by EU Directive 2015/863/EU, on the restriction on the use of certain hazardous substances in electric and electronic equipment (RoHS). This directive contains restrictions on the following materials in electric and electronic equipment: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), bis(2-Ethylhexyl) phthalate (DEHP), benzyl butyl phthalate (BBP), dibutyl phthalate (DBP) or diisobutyl phthalate (DIBP). None of these materials are intentionally added to this product.
**EU Directive 94/62/EC and Coalition of Northeastern Governors (CONEG) on Heavy Metals**

For information on the components of Dow Chelating Agents and their concentration, please refer to the Safety Data Sheet (SDS) and the Sales Specification. Hazardous constituents will be listed in the Composition Section of the SDS for this product if present at levels of 1% or above (by weight), or at any lower levels as required by applicable legislation (including but not limited to carcinogens, mutagens, reproductive toxicants and sensitizers). In addition, consult the Hazardous Decomposition Products section of the SDS and the Sales Specification for further information.

Dow does not routinely analyze for additional materials that are not listed in the SDS or Sales Specification. Specifically:

- Cadmium
- Chromium VI
- Lead
- Mercury

are not intentionally added to this product, nor expected to be present. If any trace levels happen to be present, we believe that the sum total of such trace levels should be below 100 ppm by weight, as per the requirements of European Directive 94/62/EEC and the CONEG legislation.

In addition, please note that the European Directive 94/62/EEC and the USA CONEG legislation apply to the finished article. Therefore, it is the responsibility of the manufacturer of the finished article to verify and comply with the requirements set forth in the above regulations.

**EU No. 528/2012 Biocidal Products Regulation**

VERSENE™ Chelants are not biocides and therefore do not require registration under the Biocidal Products Directive (EU No. 528/2012).
Product Stewardship

The Dow Chemical Company and its subsidiaries (“Dow”) has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take the appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products—from the initial concept and research, to manufacture, use, sale, disposal and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Medical Applications Policy

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow will not knowingly sell or sample any product or service (“Product”) into any commercial or developmental application that is intended for:

a. long-term or permanent contact with internal bodily fluids or tissues. “Long-term” is contact which exceeds 72 continuous hours;

b. use in cardiac prosthetic devices regardless of the length of time involved (“cardiac prosthetic devices” include, but are not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass-assisted devices);

c. use as a critical component in medical devices that support or sustain human life; or

d. use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.

Dow requests that customers considering use of Dow products in medical applications notify Dow so that appropriate assessments may be conducted. Dow does not endorse or claim suitability of its products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dow product is safe, lawful, and technically suitable for the intended use. DOW MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DOW PRODUCT FOR USE IN MEDICAL APPLICATIONS.

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