



Regulatory Data Sheet

DOWFROST™ Heat Transfer Fluid

Information provided in this Regulatory Data Sheet (RDS) does not indicate Dow product availability in all countries aligned with the below regulations. Please contact Dow to confirm availability of product in specific countries.

Global Chemical Inventory Compliance

Country	Inventory	Status
Australia	AIIC	All substances contained in this product are listed on the Australian Inventory of Industrial Chemicals, or are not required to be listed.
Canada	DSL	All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.
China	IECSC	All intentional components are listed on the inventory, are exempt, or are supplier certified.
Japan	ENCS	All intentional components are listed on the inventory, are exempt, or are supplier certified.
Korea	KECI	All intentional components are listed on the inventory, are exempt, or are supplier certified.
New Zealand	NZIoC	There is no requirement to list components of this product on the New Zealand Inventory of Chemicals (NZIoC).
Philippines	PICCS	All intentional components are listed on the inventory, are exempt, or are supplier certified.
Switzerland	EINECS	This product contains notifiable chemical substance(s) not on the EINECS Inventory. It may be used for research and development purposes only, and only under the supervision of a technically qualified individual. All persons engaged in research and development with this product must be informed of the hazard information in this Safety Data Sheet (SDS).
Taiwan	TCSI	All intentional components are either listed on the Inventory or exempted by regulations, or certified by vendors of their supply chemicals.
United States of America (USA)	TSCA	All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

REACH

REACH requires the registration of substances when they are manufactured or imported into the European Economic Area (EEA) at a volume of one metric ton or more per annum per legal entity. We hereby confirm that every REACH relevant substance in the composition of the above Dow product(s), made available on the EEA Market by Dow, has been accordingly covered under REACH, either via own registration or supplier coverage for the relevant tonnage band, and is therefore compliant with the REACH regulation (EC) N° 1907/2006 as per the official ECHA list published on the ECHA website <https://echa.europa.eu/information-on-chemicals/registered-substances>. The above statement is only valid for volumes imported into or manufactured within the EEA by Dow and placed on the market within the EEA. For customers based outside the EEA importing Dow products or products containing Dow products into the EEA, please note that these imports are not covered under the EEA Dow Legal Entity(ies) registrations. It is the obligation of the importer to ensure REACH compliance unless an agreement is in place that allows the importing non-EEA company's volumes to be covered under the Dow Only Representative Trustee model, which covers volumes of indirectly imported Dow products under the existing Dow registrations. The possibility of providing a Dow Only Representative Trustee coverage needs to be evaluated for each REACH relevant substance. For information on our products and REACH, visit the Dow REACH page <https://reach.dow.com/en-us>.

REACH Substances of Very High Concern (SVHC)

The product does not contain any of the Substances of Very High Concern (SVHC) listed on the most current candidate list published on the ECHA website (http://echa.europa.eu/chem_data/authorisation_process/candidate_list_table_en.asp), above the reportable limits based on composition information for the raw materials.

Dietary Laws

Halal

This product has not been manufactured or formulated with animal fats or ingredients derived from animal or fermentation products. Additionally, none of the components listed above are known by us to be present as impurities or by-products in any of the ingredients used to make this Product. Finally, ethanol is not used as a processing aid nor is it believed to be present as an impurity or by-product in this Product.

Kosher

The specifications have been reviewed for ingredient contents and sources. To the best of our knowledge, there are no ingredients that are of animal, animal fat, grain, grapes, or fermentation sources. The raw materials are organic chemicals derived from petroleum and inorganic acids/bases. This product will conform with the Kosher dietary laws and should not have difficulty in obtaining approval to use in a Kosher product. To obtain certificate please contact Dow Customer Information Group at <http://www.dow.com/en-us/contact-us-cig>.



Child Safety Regulations

Toy Safety - ASTM F963 / EN 71-3

This product is not promoted for use in children's toys.

Disruption Contingency Plan

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Our business has an extensive global warehouse and terminal network. Product inventory levels are monitored and maintained to allow coverage for most supply chain interruptions. In addition, Dow maintains co-producer relationships to address any significant gaps in supply, due to planned or unplanned events.

Environment - Air

Clean Air Act

This product is not manufactured or formulated with Class I or II substances as defined under 40 CFR part 82 of the Clean Air Act of 1990, as amended (58 FR 8136).

Hazardous Air Pollutants

To the best of our knowledge, with regards to the Clean Air Act, Section 112(b), this product does not contain any Hazardous Air Pollutants (HAPs) at or above 0.1%.

Hazard Information Reporting (RTK)

California Prop. 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Irradiation

Irradiation

This product does not contain material that has been irradiated nor has it been manufactured at any stage with irradiation.

Metal Regulations

EU Directive 2000/53/EC (and amendments)

This product conforms to the European Directive 94/62/EC, as amended, on Packaging and Packaging Waste, Article 11. Any incidental levels of lead, cadmium, hexavalent chromium, and mercury do not exceed 100 ppm total.



Coalition of Northeastern Governors (CONEG)

This product conforms to the Coalition of Northeastern Governors (CONEG) Toxic in Packaging Legislation. Any incidental levels of lead, cadmium, hexavalent chromium, and mercury do not exceed 100 ppm total.

Conflict Minerals (Dodd-Frank Wall Street Reform and Consumer Protection Act)

This product is not intentionally manufactured or formulated with the listed conflict minerals as per Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act; however, we do not analyze for these specific substances or compounds.

- Columbite-Tantalite – refined into Tantalum (Ta) (CAS # 7440-25-7)
- Cassiterite – refined into Tin (Sn) (CAS # 7440-31-5)
- Wolframite – refined into Tungsten (W) (CAS # 7440-33-7)
- Gold (Au) (CAS # 7440-57-5)

For more information please visit Dow's Corporate Website - <https://corporate.dow.com/en-us/about/codes-of-conduct>

Origin

Animal Derived Components (BSE/TSE)

With regards to Bovine Spongiform Encephalopathy (BSE)/Transmissible Spongiform Encephalopathy (TSE), to the best of our knowledge none of the raw materials are of animal origin. Therefore, we can state that BSE/TSE should not be a concern.

Genetically Modified Organisms (GMO)

To the best of our knowledge, there are no raw materials, including additives, that have been derived from genetically modified organisms (GMO).

Volatile Organic Compound

Volatile Organic Compounds (VOC) - European Union (EU)

Volatile Organic Compounds (VOC) rules and regulations vary widely depending on the use of the finished product, and the applicability of VOC regulations depends upon the jurisdiction.

The definition of VOC therefore varies, depending on the relevant Directive. For instance:

- a) Paints Directive (Directive 2004/42/EC on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products) : 'Volatile organic compound (VOC)' means any organic compound having an initial boiling point less than or equal to 250°C measured at a standard pressure of 101,3 kPa;
- b) Industrial Emissions Directive (Directive 2010/75/EU on industrial emissions (integrated pollution prevention and control)): 'Volatile organic compound' means any organic compound as well as the fraction of creosote, 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;



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The vapour pressures and boiling points of the product and/or ingredients of interest are listed in the SDS. Please note that it is the responsibility of the user to determine the appropriate regulatory requirement for their operation and/or final product use.

Volatile Organic Compounds (VOC)

With regard to Volatile Organic Compounds (VOC) content, the Environmental Protection Agency (EPA) definition of a VOC in non-consumer applications 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, methylene chloride, perchloroethylene and acetone. 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 is a VOC. 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 EPA's National VOC Emission Standards for Consumer Products Rule, as well as regulations in several states allow for the exemption of solvents from VOC regulation with a vapor pressure less than 0.1 mm Hg at 20 degrees Celsius. This exemption applies to VOC content limitations for consumer products. Please check your local regulations, and/or the Federal Rule to determine if your end use application is covered by this definition of a VOC. The vapor pressure of this product is listed on the SDS.

Waste Regulations

EU Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE)

For information on the components of our products and their concentrations, please refer to the Material Safety Data Sheets (MSDSs) 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.

EU Directive 2012/19/EU which repealed EU Directive 2002/96/EC, on Waste Electrical and Electronic Equipment (WEEE), requires that the formation of waste from electric and electronic equipment is reduced and properly managed.

This product is not intended to be used in Electrical and Electronic Equipment; therefore, it is not under the scope of the EU WEEE Directives.

General/Global Regulations

Food Allergens

This product does not contain any of the nine major food allergens (milk, eggs, fish, shellfish, tree nuts, peanuts, sesame, wheat and/or soybeans) or proteins as listed in the FALCPA of 2004 and in FDA Guidance Sec.550.250 and does not contact these food allergen during the manufacturing process. This product does not contain any of the 26 allergen ingredients as defined in the Cosmetics Products



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Regulation (EC) 1223/2009. Based on our knowledge of the manufacturing process and the raw materials used to produce this product, the following materials are not expected to be present in this product.

- Peanuts or peanut products (butter, oil, flour)
- Tree nuts (almonds, pecans, walnuts, Brazil nuts, cashew, chestnuts, etc.)
- Plant derivatives, including nuts and seeds
- Eggs or egg products (whites, yolks, meringue, mayonnaise, etc.)
- Fish (cod, flounder, salmon, trout, tuna, etc.)
- Shellfish (crustaceans and mollusks)
- Celery (root, leaves, stalk, not seeds)
- Dairy or dairy derivatives
- Cereals containing gluten
- Wheat or wheat products
- Corn or corn derivatives
- Soybean or soy products (soy derived vegetable protein, tofu, etc.)
- Sulfites
- Artificial or natural colors including FD&C Yellow #5 and #6
- Umbelliferae (carrot or parsley family)
- Flavors/enhancers
- Nitrites/nitrates

Canadian Environmental Protection Act - Challenge Substances

This product is not intentionally manufactured or formulated with the Batch Lists of Canadian Environmental Protection Agency (CEPA) Challenge Substances released as of the effective date of this document. However, we do not analyze for these specific substances.

(<http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/index-eng.php>)

CMR

For information on the components of our product and their concentrations, please refer to the Safety Data Sheet (SDS) and the Sales Specification. In the U.S. and Canada, reproductive toxins, mutagens, carcinogens, and respiratory tract sensitizers present at > 0.1% (by weight) will appear in the ingredients section of the SDS for any given product. In the EU, the EU Safety Data Sheet Directive requires the following: - Any component present at > 0.1% (by weight) and classified as a Category 1 or 2 CMR under Annex I to Directive 67/548/EEC (resp CMR 1a or 1b to ANNEX VI to Directive 1272/2008/EC (CLP)) will appear in the ingredients section of the SDS. - Any component present at > 1% and classified as a Category 3 CMR under Annex I to Directive 67/548/EEC (resp CMR 2 to ANNEX VI to Directive 1272/2008 EC (CLP)) will appear in the ingredients section of the SDS. Dow does not routinely analyze for additional materials that are not listed in the SDS or Sales Specification.

Nanomaterials

To the best of our knowledge, this product is not manufactured with nanoparticles or nanotechnologies.

Residual Solvents

For information on the residual solvents level of this product please contact our Customer Information Group (CIG) at <http://www.dow.com/en-us/contact-us>.



EU Directive 2011/65/EU (RoHS)

DIRECTIVE (EU) 2015/863 of 31 March 2015 amending Annex II to Directive 2011/65/EU of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) requires that new electrical and electronic equipment put on the market does not contain lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP). Dow does not routinely analyse for additional materials that are not listed in the SDS or Sales Specification. However we are pleased to be able to confirm that this product is not expected to contain: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP). None of these materials are intentionally added to this product.

TSCA 12b

We have reviewed the composition of the Product for the presence of TSCA 12b listed substances. Based on that review, the Product does not contain chemical components subject to TSCA section 12(b) export notification. We have reviewed the composition of this product and conclude that none of the components are subject to any reporting requirements associated with rules or orders under Sections 4,5,6,7 and 12b of TSCA. Since the list of affected chemicals continues to grow, our certification applies only to our products as currently defined for chemicals now regulated under these sections. Since this product is not regulated under the above TSCA Sections, there are no TSCA Sections 12b requirements associated with this product.

Substances and Compounds

The following substances are not expected to be present in this Product. We may not specifically analyze for the presence of these substances in the Product. Therefore, we cannot guarantee the absence or level of these substances to any specific limit or threshold value:

Bisphenol A
Natural Rubber Latex (NRL)
Halogenated Flame Retardants
Organo-Tin Compounds
Perfluoroalkylated Substances
Tris(nonylphenyl)phosphite (TNPP)
Polybrominated Biphenyls (PBB)
Polybrominated Diphenyl ether (PBDE)
Polychlorinated Biphenyls (PCB)
Di-isononyl phthalate (DINP) CAS 28553-12-0
Diethyl phthalate CAS 000084-66-2
Diethyl hexyl phthalate (DEHP) CAS 117-81-7
Di-n-butyl phthalate (DBP) CAS 84-74-2
Chlorinated paraffins
Cadmium (Cd) or cadmium compounds
Polybrominated diphenyloxides (PBDOS)
Butyl benzyl phthalate (BBP) CAS 000085-68-7
Diisobutyl phthalate (DIBP) CAS 84-69-5



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Di-iso-decyl phthalate (DIDP) CAS 26271-40-0
Di-isodecyl phthalate (DIDP) CAS 26761-40-0 / 68515-49-1
Dimethyl phthalate CAS 131-11-3
Di-n-hexyl phthalate (DnHP) CAS 84-75-3
Di-n-octyl phthalate (DNOP) CAS 117-84-0

Product Specification

For product specifications, please request a Sales Spec document for this product from The Dow Customer Information Group at <http://www.dow.com/en-us/contact-us-cig>.

Composition Statement

For information on the components of our product and their concentration, please refer to the Safety Data Sheet (SDS) and the Sales Specification. Any hazardous constituents above regulatory disclosure cut-off limits determined according to their regional and/or specific GHS classification(s) will appear in the ingredients section of the SDS. In addition, consult the Hazardous Decomposition Products section for further information. You can search <https://www.dow.com/en-us/support/sds-finder.html> for an available SDS.

Responsible Care

Dow complies with the American Chemistry Council's Responsible Care® guiding principles, codes, and management system requirements. Dow has recommitted its support for Responsible Care on a global scale by signing the Responsible Care Global Charter under the auspices of the International Council of Chemical Associations (ICCA). Dow has also endorsed the ICCA's Global Product Strategy, an effort by the global chemical industry to further improve its product stewardship efforts. Our EH&S management system is audited regularly to ensure compliance with all applicable governmental requirements, Responsible Care, and internal Dow requirements.

Dow has adopted what we call our "2025 Sustainability Goals" -- ambitious performance improvement goals with a broad external focus: strengthening our relationships with the communities where we operate, continuing to improve our product stewardship and innovation, and reducing our global footprint. In support of these goals, Dow is constantly working to improve our performance through focused EH&S programs such as the Waste Reduction Always Pays (WRAP) program. More information can be found by visiting <https://www.dow.com/en-us.html>.

Product Stewardship

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 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.



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Medical Applications Policy

NOTICE REGARDING MEDICAL APPLICATION RESTRICTIONS: Dow does not support or intend for its products to be used in:

- long-term or permanent contact with internal bodily fluids or tissues. "Long-term" is contact which exceeds 29 calendar days;
- 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);
- use as a critical component in medical devices that support or sustain human life; or
- use specifically by pregnant women or in applications designed specifically to promote or interfere with human reproduction.
- use as an ingredient of a pharmaceutical injectable application.

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.

Tobacco and Marijuana Policy

Dow does not support or intend for its products to be used, directly or indirectly, in the production of tobacco, the manufacture of tobacco products, the manufacture and use of electronic cigarettes/vaping, the production of marijuana, or the manufacture of marijuana products intended for human consumption, where the Dow product (or its residues) may be present in the finished product or be alleged to facilitate the delivery of nicotine, other tobacco components, marijuana, or marijuana components.

Harmful Applications Policy

Dow does not intend for its products to be used in applications specifically intended to harm humans.

Disclaimer

NOTICE: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

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