



## Regulatory Data Sheet

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## 3M™ Novec™ 4710 Insulating Gas

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RDSs are available at [www.3M.com](http://www.3M.com)

### Regulations and Industry Standards

#### SDS (US OSHA)

See Safety Data Sheet (SDS) for hazard and other regulatory data.

#### China RoHS

This product or part does not exceed the maximum concentration values (MCVs) in China RoHS GB/T 26572-2011 (Requirements of Concentration limits for certain restricted substances in electrical and electronic products), which means that each of the homogeneous materials within this product is below the following MCVs: (a) 0.1% (by weight) for lead and its compounds, mercury and its compounds, hexavalent chromium and its compounds, polybrominated biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium and its compounds.

#### Conflict Minerals

Conflict Minerals, which the U.S. Securities and Exchange Commission ("SEC") has defined as gold, columbite-tantalite (coltan), cassiterite, wolframite, or their derivatives (tin, tantalum, or tungsten), are not contained in or are not "necessary to the functionality or necessary to the production" of the above-listed product, as the term "necessary to the functionality or the production" is defined under the SEC's Conflict Minerals Rule. 77 Fed. Reg. 56274 (Sept. 12, 2012).

#### EU Azo Colourant Directive

This product does not contain azo dyes which, by reductive cleavage of one or more azo groups, may release one or more of the aromatic amines listed in the Appendix I, in detectable concentrations above 30 ppm in the finished article or in the dyes parts thereof, according to the testing method established in accordance with Article 2a of this European Commission Directive 2002/61/EC (2004/21/EC).

#### EU REACH

This product is a chemical preparation under Regulation No 1907/2006 of the European Parliament and the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH). To the best of its knowledge, 3M has pre-registered and has registered/is intending to register all substances of its chemical preparations that it currently imports into and/or manufactures in the European Union that are in scope for (pre-)registration by 3M. It has a required safety data sheet.

#### EU REACH

This product, including any article that the product is composed of, does not contain at greater than 0.1% by weight a Substance of Very High Concern (SVHC) substance identified according to Article 59 of REACH. This declaration reflects the substances on the candidate SVHC list, effective July 2019.

#### EU RoHS

This product does not exceed the maximum concentration values (MCVs) set under EU Directive 2011/65/EU (RoHS recast/RoHS 2), as stated in Annex II to that directive. This means that each of the homogenous materials within this product does not exceed the following MCVs: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; and (b) 0.01% (by weight) for cadmium.

#### Chemicals and/or Compounds of Interest

**4,4'-Methylenebis(2,6-Diethylaniline)** : This chemical or chemical compound is not intentionally added.  
**Acrylamide** : This chemical or chemical compound is not intentionally added.  
**Alkylphenol (AP)** : This chemical or chemical compound is not intentionally added.  
**Alkylphenoethoxylates (APE)** : This chemical or chemical compound is not intentionally added.  
**Antimony and (Sb) Compounds** : This chemical or chemical compound is not intentionally added.  
**Aromatic Amines** : This chemical or chemical compound is not intentionally added.  
**Arsenic and (As) Compounds** : This chemical or chemical compound is not intentionally added.  
**Asbestos** : This chemical or chemical compound is not intentionally added.  
**Azo Colorants** : This chemical or chemical compound is not intentionally added.  
**Benzenamine, N-Phenyl-, Reaction Products with Styrene and 2,4,4-Trimethylpentene (BNST)** : This chemical or chemical compound is not intentionally added.  
**Beryllium and (Be) Compounds** : This chemical or chemical compound is not intentionally added.  
**Bis(2-Methoxyethyl) Phthalate** : This chemical or chemical compound is not intentionally added.  
**Bismuth and (Bi) Compounds** : This chemical or chemical compound is not intentionally added.  
**Bisphenol A (BPA)** : This chemical or chemical compound is not intentionally added.  
**Butyl Benzyl Phthalate (BBP)** : This chemical or chemical compound is not intentionally added.  
**Butylated Hydroxytoluene (BHT)** : This chemical or chemical compound is not intentionally added.  
**Cadmium and (Cd) Compounds** : This chemical or chemical compound is not intentionally added.  
**Chlorinated Paraffins, Short Chain** : This chemical or chemical compound is not intentionally added.  
**Chlorinated Polyethylene** : This chemical or chemical compound is not intentionally added.  
**Chlorofluorocarbons (CFCs)** : This chemical or chemical compound is not intentionally added.  
**Chloroprene (Neoprene)** : This chemical or chemical compound is not intentionally added.  
**Chlorosulfonated Polyethylene** : This chemical or chemical compound is not intentionally added.  
**Chromium and (Cr) Compounds** : This chemical or chemical compound is not intentionally added.  
**Colophony (Rosin)** : This chemical or chemical compound is not intentionally added.  
**Creosote** : This chemical or chemical compound is not intentionally added.  
**Crystalline Silica** : This chemical or chemical compound is not intentionally added.  
**Decabromodiphenyl Ether (Deca-BDE)** : This chemical or chemical compound is not intentionally added.  
**Di(2-Ethylhexyl) Phthalate (DEHP)** : This chemical or chemical compound is not intentionally added.  
**Dibutyl Phthalate (DBP)** : This chemical or chemical compound is not intentionally added.  
**Dibutyl Tin Compounds** : This chemical or chemical compound is not intentionally added.  
**Diisobutyl Phthalate (DIBP)** : This chemical or chemical compound is not intentionally added.  
**Diisodecyl Phthalate (DIDP)** : This chemical or chemical compound is not intentionally added.  
**Diisononyl Phthalate (DINP)** : This chemical or chemical compound is not intentionally added.  
**Dimethyl Fumarate (DMF)** : This chemical or chemical compound is not intentionally added.  
**Dimethylacetamide** : This chemical or chemical compound is not intentionally added.  
**Di-n-Octyl Phthalate (DNOP)** : This chemical or chemical compound is not intentionally added.  
**Dioxins and Furans** : This chemical or chemical compound is not intentionally added.  
**Dyes** : This chemical or chemical compound is not intentionally added.  
**Epoxy Compounds** : This chemical or chemical compound is not intentionally added.  
**Flame Retardants (not PBB or PBDE)** : This chemical or chemical compound is not intentionally added.  
**Flavorings** : This chemical or chemical compound is not intentionally added.  
**Formaldehyde** : This chemical or chemical compound is not intentionally added.  
**Genetically Modified Organisms (GMOs)** : This chemical or chemical compound is not intentionally added.

**Gluten** : This chemical or chemical compound is not intentionally added.

**Halogenated Compounds** : This product is known to contain this chemical or chemical compound.

**Halogenated Flame Retardants** : This chemical or chemical compound is not intentionally added.

**Hexabromo Cyclo-Dodecane (HBCD)** : This chemical or chemical compound is not intentionally added.

**Hexavalent Chromium and (Cr+6) Compounds** : This chemical or chemical compound is not intentionally added.

**Hydrochlorofluorocarbons (HCFCs)** : This chemical or chemical compound is not intentionally added.

**Lead and (Pb) Compounds** : This chemical or chemical compound is not intentionally added.

**Materials of Human or Animal Origin** : This chemical or chemical compound is not intentionally added.

**Melamine** : This chemical or chemical compound is not intentionally added.

**Mercury and (Hg) Compounds** : This chemical or chemical compound is not intentionally added.

**Musk Xylene** : This chemical or chemical compound is not intentionally added.

**Natural Rubber Latex** : This chemical or chemical compound is not intentionally added.

**Nickel and (Ni) Compounds** : This chemical or chemical compound is not intentionally added.

**N-Nitrosamines** : This chemical or chemical compound is not intentionally added.

**Nonylphenol (NP)** : This chemical or chemical compound is not intentionally added.

**Nonylphenol Ethoxylates (NPE)** : This chemical or chemical compound is not intentionally added.

**Nuts** : This chemical or chemical compound is not intentionally added.

**Organochlorine Pesticides** : This chemical or chemical compound is not intentionally added.

**Organophosphate Pesticides** : This chemical or chemical compound is not intentionally added.

**Organotin Compounds** : This chemical or chemical compound is not intentionally added.

**Ozone Depleting Chemicals (ODCs)** : This chemical or chemical compound is not intentionally added.

**Pentachlorophenol** : This chemical or chemical compound is not intentionally added.

**Perfluorooctane Sulfonate (PFOS)** : This chemical or chemical compound is not intentionally added.

**Perfluorooctanoic Acid (PFOA)** : This chemical or chemical compound is not intentionally added.

**Petrochemical Fertilizers** : This chemical or chemical compound is not intentionally added.

**Phenol** : This chemical or chemical compound is not intentionally added.

**Phosphorus and (P) Compounds** : This chemical or chemical compound is not intentionally added.

**Phthalates** : This chemical or chemical compound is not intentionally added.

**Polybrominated Biphenyls (PBB)** : This chemical or chemical compound is not intentionally added.

**Polybrominated Diphenylethers (PBDE)** : This chemical or chemical compound is not intentionally added.

**Polychlorinated Biphenyls (PCBs)** : This chemical or chemical compound is not intentionally added.

**Polychlorinated Naphthalenes (>3 Chlorine Atoms)** : This chemical or chemical compound is not intentionally added.

**Polycyclic Aromatic Hydrocarbons (PAHs)** : This chemical or chemical compound is not intentionally added.

**Potassium and (K) Compounds** : This chemical or chemical compound is not intentionally added.

**PVC (Polyvinyl Chloride)** : This chemical or chemical compound is not intentionally added.

**Radioactive Substance** : This chemical or chemical compound is not intentionally added.

**Selenium and (Se) Compounds** : This chemical or chemical compound is not intentionally added.

**Silicone** : This chemical or chemical compound is not intentionally added.

**Sulfur and (S) Compounds** : This chemical or chemical compound is not intentionally added.

**Tetrabromobisphenol A (TBBA)** : This chemical or chemical compound is not intentionally added.

**Tin and (Sn) Compounds** : This chemical or chemical compound is not intentionally added.

**Tributyl Tin Compounds** : This chemical or chemical compound is not intentionally added.

**Triphenyl Tin Compounds** : This chemical or chemical compound is not intentionally added.

**Urea-Formaldehyde (UF)** : This chemical or chemical compound is not intentionally added.

**Zinc and (Zn) Compounds** : This chemical or chemical compound is not intentionally added.

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