United States of America



DEPARTMENT OF STATE

To all to whom these presents shall come, Greetings:

I Certify That the document hereunto annexed is under the Seal of the State(s) of Texas, and that such Seal(s) is/are entitled to full faith and credit.*

*For the contents of the annexed document,the Department assumes no responsibility This certificate is not valid if it is removed or altered in any way whatsoever

In testimony whereof, I, John F. Kerry, Secretary of State, have hereunto caused the seal of the Department of State to be affixed and my name subscribed by the Assistant Authentication Officer, of the said Department, at the city of Washington, in the District of Columbia, this first day of July, 2016.

Issued pursuant to CHXIV, State of Sept. 15, 1789, 1 Stat. 68-69; 22 USC 2657; 22USC 2651a; 5 USC 301; 28 USC 1733 et. seq.; 8 USC 1443(f); RULE 44 Federal Rules of Civil Procedure.

Secretary of State

Assistant Authentication Officer,
Department of State



Ministerio de Relaciones Exteriores Embajada de Chile en Estados Unidos Sección Consular

El Cónsul que suscribe, certifica la autenticidad de la firma de:

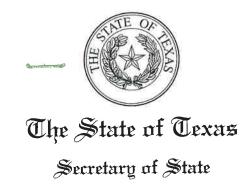
VEDA L. MATTHEWS

ASSISTANT AUTHENTICATION OFFICER, DEPARTMENT OF STATE

ARTURO GIADALA SUKNI Cónsul de Chile







I, Carlos H. Cascos, Secretary of State of the State of Texas, DO HEREBY CERTIFY that according to the records of this office,

ALICE HERNANDEZ

was commissioned as a Notary Public for the State of Texas on May 21, 2016, for a term ending on May 21, 2020.

Issued: June 27, 2016

Certificate Number 10503428



Carlos H. Cascos
Secretary of State
GF/els

January 27, 2014

Cindy Bach Alcon 6201 South Freeway Fort Worth, TX 76134-2099



PROPYLENE GLYCOL USP/EP

A product of Lyondell Chemie Nederland B.V.; Lyondell Chimie France S.A.S.; Lyondell Chemical Company

Dear Cindy Bach:

The following is in response to your request for Product Stewardship Information (PSInfo) for the product listed above. The attached Product Stewardship Bulletin (PSB) details the regulatory status of this product.

LyondellBasell Industries responds to product stewardship requests with a standardized Product Stewardship Bulletin (PSB) which summarizes the global regulatory status of a product. LyondellBasell Industries will not complete customers' forms or questionnaires. Standardized responses provide each customer with consistent information in a timely fashion. Each request is reviewed to ensure our response documents provide relevant information.

Please note that compliance with these regulations should not be interpreted to guarantee that the product, will, in fact, perform in a particular application. Your Technical Service Representative can help you determine that the characteristics of the product are compatible with the desired conditions of use.

Should you have any further questions concerning a LyondellBasell product, or if we can assist in any other way, please do not hesitate to contact us.

Best regards,

J. Stephen Bass, Ph.D. Senior Business Consultant

713-309-4375

stephen.bass@lyondellbasell.com

Christiaan Fetter Senior Business Consultant

+31 10 275 5568

christiaan.fetter@lyondellbasell.com

Product Stewardship Bulletin



PROPYLENE GLYCOL USP/EP

A product of Lyondell Chemie Nederland B.V.; Lyondell Chimie France S.A.S.; Lyondell Chemical Company

Active Pharmaceutical Ingredient (API)

This material is manufactured for use as a Bulk Pharmaceutical Excipient. It is not intended for use as an Active Pharmaceutical Ingredient.

Additives

This product contains no intentional additives of any sort, including but not limited to inhibitors, corrosion inhibitors, stabilizers, processing aids, colorants, flavors, or antioxidants.

Alcohol Content

This product contains no ethyl alcohol (frequently called ethanol) (CAS # 64-17-5).

Allergen Statements

Allergen - General

This product contains no identified allergenic materials including:

Cereals containing gluten or products of these

Dairy or dairy products Peanut or peanut products

Shellfish or shellfish products Tree nut or tree nut products

Bananas **Tartrazine**

Sugar, monosaccharides or disaccharides

Preservatives Artificial flavor

Modified cornstarch Artificial color

Phenylalanine

Yeast

Sulfur dioxide or sulfites

Wheat or wheat products

Soybean or soybean products

Egg or egg products

Fish or fish products

Seed or seed products

No identified allergenic materials are present in the manufacturing facility and the product is manufactured in dedicated equipment.

Allergen CA - Health Canada Food Allergen Labeling Regulations

None of the materials regulated under Health Canada's Regulations Amending the Food and Drug Regulations (1220 — Enhanced Labelling for Food Allergen and Gluten Sources and Added Sulphites), effective August 4, 2012, are used in the formulation or manufacture of this product. None of these materials are present in the manufacturing facility and the product is manufactured in dedicated equipment.

Allergen - Food Allergen European Directive 2007/68/EC

Directive 2007/68/EC of the European Commission and the of the Council of 27 November 2007 as regards certain food ingredients.

The food ingredients listed in the Annex IIIa of European Directive 2007/68/EC are not used in the manufacture of or formulation of this product. However, this product has not been tested for these substances.

Allergen - Food Allergen Labeling and Consumer Protection Act of 2004 (FALCPA)

No major food allergens (e.g., Milk, Eggs, Fish, Crustacean Shellfish, Tree Nuts, Wheat, Peanuts, Soybeans, Sesame Seeds, Sulphites) nor protein derived from them are used in the formulation or manufacture of this product.

Animal Feed Status - EU Regulation 767/2009/EC

Regulation 767/2009/EC on the placing on the market and use of feed of 13 July 2009.

In 2010 Propylene Glycol has been reclassified as animal feed material as per EU Regulation 767/2009/EC, repealing the previous listing as feed additive with E number E490 pursuant to EU Regulation 1831/2003/EC. The Catalogue of approved feed materials associated with Regulation 767/2009/EC has been updated and published as Commission Regulation EU No 575/2011 on 16 June 2011 to include the products under part 1 of the Annex. Propylene Glycol is listed in the Catalogue under number 13.11.1. Also the EU Register of listed feed materials has been changed to include Propylene Glycol (http://www.feedmateerialsregister.eu).

Propylene Glycol is not to be used in cat feed due to the specific differential metabolism of cats.

Regulation 767/2009/EC should always be consulted in complete context before any conclusion is made as to the allowed regulated use.

Animal Non-Testing Declaration

This material has not been the subject of animal testing or retesting for cosmetic purposes by or on behalf of LyondellBasell since December 31, 1990. Animal testing for cosmetic purposes is defined as any animal test carried out on a material primarily developed for use in the cosmetics industry or on a material primarily developed for use outside the cosmetics industry where the test is for a cosmetics purpose. Animal is defined as any living vertebrate (other than man) including mammals, birds and reptiles from halfway through gestation or incubation period or fish and amphibians from the time they become capable of independent feeding.

Please note that this should not be interpreted to guarantee or warrant that the product can, in fact, be used for cosmetic purposes. The user should determine that the chemical properties of the product are appropriate for their desired end use.

LyondellBasell Product Stewardship Information Date: 1/27/2014

14 Page 3 of 17

Aromatic Content

For compositional information on our products, please consult the appropriate regional MSDS and Sales Specification or Technical Data Sheet which can be located at http://www.lyondellbasell.com. We do not routinely analyze for materials not listed on a product's Sales Specification or Technical Data Sheet. We do not test for materials not reasonably expected to be present in our products.

Bioaccumulation

See MSDS

Biodegradability

See MSDS

Biomedical Policy

This product may not be used in the manufacture of any of the following applications: U.S. FDA Class III medical devices; Health Canada Class IV medical devices; European Class III medical devices; applications involving permanent implantation into the body; life-sustaining medical applications; and lead, asbestos or MTBE related applications.

This product may not be used in any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I medical devices, without prior notification to Seller for each specific product and application.

This product may not be used in the manufacture of any of the following, without prior written approval by Seller for each specific product and application: U.S. FDA Class II medical devices; Health Canada Class II or III medical devices; European Union Class II medical devices; or any equivalent U.S. FDA, Health Canada, or European Union regulations pertaining to medical devices; packaging in direct contact with a pharmaceutical active ingredient and/or dosage form; and tobacco-related products and applications.

All references to the U.S. FDA, Health Canada and European Union regulations include all other country's equivalent regulatory classifications.

Bioterrorism Registration Number

Lyondell Chemical Company; Bayport, TX; Registration number: 15535379448

BSE - Bovine Spongiform Encephalopathy

This product is manufactured by a synthetic process using only petrochemical raw materials. No materials derived from plants or animals are incorporated as raw materials, processing aids or additives.

Bulk Pharmaceutical Excipient

This material is manufactured for use as a Bulk Pharmaceutical Excipient. It is not intended for use as an Active Pharmaceutical Ingredient.

LyondellBasell Product Stewardship Information

Date: 1/27/2014

California Prop 65

Please refer to the MSDS for communications regarding California Proposition 65.

Code Numbers

CAS#: 57-55-6 EINECS: 200-338-0

NAFTA Harmonized Tarrif System (HTS) Code: 2905.32.0000

Composition

For compositional information on our products, please consult the appropriate regional MSDS and Sales Specification or Technical Data Sheet which can be located at http://www.lyondellbasell.com. We do not routinely analyze for materials not listed on a product's Sales Specification or Technical Data Sheet. We do not test for materials not reasonably expected to be present in our products.

Cosmetics - EU Regulation (EC) 1223/2009

Regulation (EC) 12223/2009 of the European Parliament and the Council of 30 November 2009 on Cosmetic Products (Cosmetics Regulation) works on the principle of a "negative" list which defines substances that are prohibited or restricted for use in cosmetics. Propylene Glycol USP/EP (PG-USP/EP) is not negatively listed in the Cosmetics Regulation.

More in specific with respect to the Cosmetics Regulation:

- Article 14: PG-USP/EP is not listed in Annexes II or III as a prohibited or restricted substance;
- Article 15: PG-USP/EP is not classified as a CMR under Regulation EC No 1272/2008;
- Article 16: Nanomaterials are not used in the manufacture or formulation of PG-USP/EP. However, this product has not been tested for nanomaterials;
- Article 18: Animal testing: please refer to the Animal Non-Testing statement in this Product Safety Bulletin.

Although PG-USP/EP is not negatively listed by the Cosmetics Regulation, this should not be interpreted to guarantee or warrant that the product can, in fact, be used for cosmetic purposes. The user should determine that the properties of the product are appropriate for their desired end-use.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

See MSDS.

CONEG - Coalition of Northeastern Governors

The chemical materials listed below are not used in the manufacture or the formulation of this product. However, this product has not been tested for these chemical materials:

Lead, mercury, cadmium and hexavalent chromium, as identified in the CONEG Model Legislation.

Country of Origin

Date: 1/27/2014

This product is manufactured in the USA and/or the European Union (EU).

Dedicated Process

This product is manufactured, stored and handled using equipment dedicated to its production.

Drug Master File (DMF)

Lyondell Chemical Company has not established a FDA Drug Master File for this product.

Environmental Fate

Propylene glycol is expected to degrade rapidly in the vapor phase by reaction with photochemically produced hydroxyl radicals. It has an estimated half-life of 32 hours in an average ambient atmosphere. Propylene glycol is expected to degrade relatively rapidly via biodegradation in water. It is not expected to be susceptible to hydrolysis, oxidation, volatilization, bioconcentration, and adsorption to sediments. Propylene glycol is expected to degrade relatively rapidly via biodegradation in soil. Due to its high mobility and low adsorptivity, propylene glycol is susceptible to leaching. However, concurrent biodegradation may be rapid enough to diminish the significance of leaching. Evaporation from dry (but not moist) soil surfaces is likely to occur.

European Pharmacopoeia

This product complies with all requirements of the European Pharmacopeia.

FDA Code of Federal Regulations (CFR) References

The major component of this product is mentioned in the following Title 21 of the U.S. Code of Federal Regulations (21 CFR). For other product components, please consult the appropriate regional MSDS and Sales Specification or Technical Data Sheet which can be located at http://www.lyondellbasell.com. The CFR sections for all components of a product should always be consulted in complete context before any conclusion is made as to the allowed regulated use. Please note that substances listed in 21 CFR may carry limitations and/or use restrictions.

In addition, compliance with these regulations should not be interpreted to guarantee that the material can, in fact, be used for a given application. The user should determine that the physical properties, purity and composition of the material are compatible with the desired conditions of use.

The major component 21 CFR references:

21 CFR 175.105; Adhesives

21 CFR 175.300; Resinous and polymeric coatings

21 CFR 175.320; Resinous and polymeric coatings for polyolefin films

21 CFR 176.210; Defoaming agents used in the manufacture of paper and paperboard

21 CFR 177.1680; Polyurethane resins

21 CFR 177.2420; Polyester resin, cross-linked

21 CFR 177.2600; Rubber articles intended for repeat use

21 CFR 177.2800; Textiles and textile fibers

21 CFR 184.1666: Substances affirmed as GRAS - Cleared for use under the regulation

21 CFR 582.1666; Substances Generally Recognized As Safe (except in cat food)

21 CFR 582.4666; Animal food

FDA Status (U.S. Food and Drug Administration)

This product is suitable for use in all those applications specifically authorized in Chapter 21 of the Code of Federal Regulations.

Flavor and Extract Manufacturers Association (FEMA)

Number 2940, listed as propylene glycol or synonym 2-Hydroxypropanol.

Food Additive Status - EU Directives 95/2/EC and 231/2012/EC

Directive 95/2/EC on Food Additives other than Colors and Sweeteners of 20 February 1995, and subsequent amendments.

In Europe, Propylene Glycol is not approved as a general-purpose food grade product or direct food additive for human consumption. However, it is regulated by Directive No 95/2/EC and has been assigned E-number E1520:

- As a carrier/carrier solvent for colors, emulsifiers, antioxidants and enzymes, with a maximum allowed level of 1 g/kg in the final foodstuffs
- In flavorings, with a maximum allowed level of 3 g/kg, from all sources in foodstuffs as consumed or reconstituted according to the instructions of the manufacturer, individually or in combination
- In flavorings for beverages, with the exception of cream liqueurs, with a maximum allowed level of 1 g/l.

LyondellBasell Propylene Glycol USP/EP fulfills the criteria for E1520 as detailed in EU Commission Regulation No 231/2012/EC of 9 March 2012 laying down specifications for food additives listed in Annexes II and III to Regulation No 1333/2008.

Regulations 95/2/EC and 231/2012/EC should always be consulted in complete context before any conclusion is made as to the allowed regulated use.

Food Chemical Codex (FCC)

This product meets all requirements of the Food Chemicals Codex.

Food Contact Plastic Status - EU Regulation 10/2011/EC

Regulation 10/2011/EC on "Plastic Materials and Articles Intended to Come into Contact with Food" of 14 January 2011.

This product is listed in Annex I of the Regulation in the Union list of authorized monomers, other starting substances, macromolecules obtained from microbial fermentation, additives and polymer production aids. Although listed in Annex I of the Regulation, it is the responsibility of the user to determine that the technical quality and purity of this product are suitable for the intended and foreseeable use of the plastic material or article. Regulation 10/2011/EC should always be consulted in complete context before any conclusion is made as to the allowed regulated use. Please note that the product may carry a Specific Migration Limit (SML).

The overall migration limit as specified in Regulation 10/2011/EC from the final plastic material or article to food can not be greater than 10 mg of total constituents per dm2 of food contact surface. For plastic materials and articles intended to come into contact with food for infants and young children (as defined by Directives 2006/141/EC and 2006/125/EC), the overall migration limit shall not be greater than 60 mg of total constituents per kg of food. The overall migration limit is the responsibility of the manufacturer of the final plastic material or article.

In addition, the manufacturer of the final plastic material or article must verify that the plastic material or article, manufactured according to Good Manufacturing Practices (GMP), does not modify the organoleptic properties of the food.

Propylene Glycol is authorized as an additive or polymer production aid (Reference number 23740) and as a monomer or other starting substance (Reference number 81840), without restrictions or specific migration limits (SML).

General Product Information

General product information such as Benefits, Applications, Properties, Toxicology, Regulatory Status, Storage and Handling and technical information such as MSDS, Sales Specifications and Technical Literature can be located on LyondellBasell.com.

Generally Recognized as Safe (GRAS)

Propylene Glycol has been affirmed by the United States Food and Drug Administration as Generally Recognized as Safe (GRAS) when used as a direct human food ingredient in Chapter 21 of the Code of Federal Regulations 184.1666.

Genetically Modified Organisms (GMO)

This product is manufactured by a synthetic process and no materials of plant or animal origin are incorporated as raw materials, processing aids or additives.

Global Inventories

See MSDS.

LyondellBasell Product Stewardship Information Date: 1/27/2014

Page 8 of 17

Gluten

Good Manufacturing Practices (GMP)

LyondellBasell follows the Good Manufacturing Practices Guide for Bulk Pharmaceutical Excipients prepared by the International Pharmaceutical Excipients Council for the manufacture and distribution of propylene glycol USP.

GMP+

The material produced at the LyondellBasell Botlek and Fos-sur-Mer plants have been certified GMP+. A copy of the certification is available on the LyondellBasell website - LyondellBasell.com.

Halal Certification

The material produced at our Bayport, Texas Plant in the USA has been certified Halal. A copy of the certification is available on the LyondellBasell website at:

http://www.lyondellbasell.com/Products/QualitySystems/QualityCertificates/LyondellSite/Lyondell_Certific ations.htm

The material produced at our Botlek and Fos-sur-mer plant is not certified as Halal. However, this product is not manufactured from nor does it contain any animals, animal products or by-products. It contains no alcohol (ethanol).

Halogenated Compounds

Halogenated compounds are not used in the manufacture or the formulation of this product. However, this product has not been tested for these chemical materials.

Harmonized Tariff System Code

2905320000

Hazard Analysis and Critical Control Point (HACCP)

The material produced at the LyondellBasell Botlek and Fos-sur-Mer plants has been certified HACCP. A copy of the certification is available on the LyondellBasell website - LyondellBasell.com.

LyondellBasell has not developed a HACCP plan for the material produced at the Bayport plant (Pasadena TX USA). The FDA does not require such a plan for propylene glycol.

Hazardous Air Pollutants (HAPs) - U.S. Environmental Protection Agency

The major component of this product is not listed as a Hazardous Air Pollutant under Section 112 of the Clean Air Act Amendments of 1990. For other product components, please consult the appropriate regional MSDS and Sales Specification or Technical Data Sheet which can be located at http://www.lyondellbasell.com.

Visit Environmental Protection Agency's (EPA's) website for up-to-date HAPs listings: http://www.epa.gov/ttn/atw/188polls.html.

Heavy Metals

The chemical materials listed below are not used in the manufacture or the formulation of this product. However, this product has not been tested for these chemical materials:

Lead (Pb), zinc (Zn), cadmium (Cd), mercury (Hg), chromium (Cr), and tin (Sn).

Irradiation

This product is not treated with radiation.

Japanese Pharmacopeia JP

This product complies with all requirements of the Japanese Pharmacopeia.

Kosher Certification

This product has been certified Kosher and Pareve. A copy of the certification is available on the LyondellBasell website at: http://www.lyondellbasell.com/Products/QualitySystems/QualityCertificates/

Latex

No materials containing latex or natural rubber are used in the manufacturing, handling and packaging processes for this product.

Manufacturing Information

Date of Manufacture

For shipments from Lyondell's Bayport, Rotterdam and Fos plants the date of manufacture is shown as the Manufacturing Date in the data fields. The date is in the yyyymmdd, where yyyy is the year, mm is month and dd is day.

Dedicated Process

This product is manufactured, stored and handled using equipment dedicated to its production.

Lot Definition

For the United States manufacturing facility located in Pasadena Texas lot numbers are assigned to each 24 hours of continuous production. For remote terminals, new lot numbers are assigned and the tank is analyzed after each transfer of material into the tank.

Lot Number and Traceability

For shipments from Lyondell's Bayport plant lot traceability may be maintained through either the Batch Number or Delivery Item No. in the header or through the Inspection Lot in the data field under Test Description.

Manufacturing Location

Lyondell Chemical Company propylene glycol distributed in North and South America is manufactured in the Bayport facility located at 10801 Choate Road, Pasadena, TX, 77507. LyondellBasell propylene glycol distributed in Europe, the Middle East and Africa is manufactured at European facilities located at Fos-sur- Mer, France, and Rotterdam, the Netherlands.

Manufacturing Process

LyondellBasell propylene glycol is manufactured by the high temperature reaction of propylene oxide (PO) and water. The crude product is purified by distillation.

Material Safety Data Sheet (MSDS)

The MSDS for this product is available on the LyondellBasell website http://www.lyondellbasell.com/Products/ByCategory/.

Melamine Free

Melamine is not used in the manufacture or the formulation of this product. However, this product has not been tested for Melamine.

Metals - EMEA

Metal catalysts and/or metal reagents are not used in the manufacture or formulation of this product. However, this product has not been tested for individual metal residues as listed in the European Medicines Agency's "Guideline on the Specification Limits for Residues of Metal Catalysts or Metal Reagents", doc. ref. EMEA/CHMP/SWP/4446/2000.

Microbiological Activity

LyondellBasell does not routinely test propylene glycol USP for microbiological activity. Occasional testing of PG USP has indicated that propylene glycol in high concentrations does not support microbial growth.

Nanomaterials

Nanomaterials are not used in the manufacture or the formulation of this product. However, this product has not been tested for nanomaterials.

National Organic Regulation - USDA

Propylene Glycol does not meet the guidelines of organic compliance as set by the USDA National Organic Program. It is derived from synthetic origin and is not listed under 7 CFR 205.605.

Natural Statement

Propylene glycol USP is synthesized by LyondellBasell solely from petrochemical raw materials. Propylene glycol does not occur freely in nature and is not derived from plants or other biological materials.

Nutritional Content

The nutritional content of Propylene Glycol is 400 calories/100 g of PG. This nutritional content was determined using the general factor of 4 cal/g as per 2l CFRI0l.9(c)(l). Propylene Glycol is considered a carbohydrate according to the definition of 2lCFRI0l.9(c)(6). A complete nutritional profile for PG follows.

Calories: 400 cal/l00g (1) Fat N.A. g Moisture: 0.2 g/100g Saturated: g Protein: N.A. g Unsaturated: g Ash: N.A. g Monounsaturated: g

Carbohydrates: 1 g/g (2) Polyunsaturated: g

Complex: g Cholesterol: N.A. mg Sugars: None Total Dietary Fiber:N.A g Vitamin A: N.A. I.U. Soluble: g Vitamin C: N.A. mg Insoluble: g Thiamin: N.A. mg Iron: N.A. mg

Thiamin: N.A. mg Iron: N.A. mg Niacin: N.A. mg NE Calcium: N.A. mg Riboflavin: N.A. mg Sodium: N.A. mg

Potassium: N.A. mg

g = gram, mg = milligram, I. U. = international units, and NE = niacin equivalent.

(1) 21 CFR 101.9(c)(1) (2) 21 CFR 101.9(c)(6)

Origin

This product is manufactured by a synthetic process using only petrochemical raw materials. No materials derived from plants or animals are incorporated as raw materials, processing aids or additives.

Ozone Depleting Substances

The chemical materials listed below are not used in the manufacture or the formulation of this product. However, this product has not been tested for these chemical materials:

Ozone depleting substances as defined by the U.S. Environmental Protection Agency.

Pesticide Free Statement

LyondellBasell Product Stewardship Information Date: 1/27/2014

This product is synthesized solely from petrochemical raw materials. It is manufactured in a closed system, and pesticides are not used in the process. It is not tested for pesticide residue.

Phthalate Free

Phthalates are not used in the manufacture or the formulation of this product. However, this product has not been tested for phthalates.

Quality System Certifications

Quality system certifications can be located at:

http://www.lyondellbasell.com/Products/QualitySystems/QualityCertificates/

REACh Information

REACh Annex XVII

REACH Annex XVII – Restriction on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles.

The chemical materials listed are not used in the manufacture or the formulation of this product. However, this product has not been tested for these chemical materials.

See Product's European MSDS at http://www.lyondellbasell.com for classification and labeling of chemicals which are legally binding within the EU - including carcinogen, mutagenic and reproductive toxins (CMR).

REACh Only Representative (OR) Services

Companies of LyondellBasell in North America will evaluate enquiries for OR services.

Please forward your request for OR services to reach@lyondellbasell.com.

REACh Registration Status

The substances contained in this product have been registered under REACH by relevant companies of LyondellBasell in the European Union (EU), which either manufacture this product in their plant(s), or import this product into the EU. In case of preparations, such companies have received from their suppliers confirmation that the substances in such preparations have been pre-registered and/or registered under REACH.

For the REACH registration numbers of our products, please consult the appropriate regional MSDS at http://www.lyondellbasell.com.

REACh Use Management

LyondellBasell is following the European Chemical Industry Council (CEFIC) guidelines on collecting uses internally as well as within Consortia and other industry groups. Uses are defined in the form of Generic Exposure Scenarios (GES) titles.

The development of a GES is a possibility provided in REACH (legally defined as "use and exposure category"), and the GES model is supported by the European Chemicals Agency (ECHA) and CEFIC. Next to this GES model, use definition is made in terms of use descriptors from ECHA's Use Descriptor Model.

Customers of LyondellBasell are invited to review our registration and supported use intentions at the web address below. Please contact reach@lyondellbasell.com if there is a use that you would like added as an "identified use" (i.e., use supported that is not listed at present). Requests should be made in terms of GES titles rather than individual use descriptor elements, such as Process Categories (PROCs), Product Categories (PCs), etc.

http://www.lyondellbasell.com/Sustainability/ProductStewardship/LyondellBasellandREACH/

REACh Substances of Very High Concern (SVHC)

This product does not contain any of the Annex XIV candidate chemicals proposed to be SVHC (Substances of Very High Concern) (List as of December 16, 2013) above the 0.1% threshold as stated in REACH (Article 57, Regulation No. 1907/2006) determined either through (i) non-use of the substance, (ii) mass balance calculation, or (iii) specific testing.

The chemical materials listed are not used in the manufacture or the formulation of this product. However, this product has not been tested for these chemical materials.

Residual Solvents - USP General Chapter <467>

The current edition of the United States Pharmacopeia, in section <467> "Residual Solvents", specifies limits on Residual Solvents. Section <467> lists classes of Residual Solvents which may not be completely removed by practical manufacturing techniques.

None of the solvents listed as Class 1, Class 2, Class 3 or those listed in Table 4 are used as raw materials or processing aids, none are expected to be by-products of the manufacturing process, and none are added to the final product. We do not test for materials not reasonably expected to be present in our products.

Propylene glycol is manufactured by the reaction of propylene oxide and water and no other solvents are used. In routine analyses of this product, propylene oxide is not detected. Dipropylene glycol, which is typically present at 0.10 - 0.20%, is not currently listed in Section <467> as a residual solvent.

RoHS - EU Directive 2011/65/EU

LyondellBasell Product Stewardship Information Date: 1/27/2014 Directive 2011/65/EU on "The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment" of 8 June 2011.

The chemical materials listed in Annex II (Restricted substances) of Directive 2011/65/EU are not used in the manufacture and formulation of this product. However, this product has not been tested for these chemical materials:

lead (Pb), mercury (Hg), cadmium (Cd), hexavalent chromium (Cr), polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE).

SARA

See MSDS section 15.

Shipping

LyondellBasell ships propylene glycol USP/EP in tank trucks, railcars, isotanks, barges and deepwater vessels. Shipping containers are constructed of stainless steel or mild steel with an FDA-compliant lining. In non-dedicated containers, the prior cargoes are considered for their compatibility with PG USP/EP and for the risks of contamination of the product.

Solid Contamination

This product is a liquid, produced via a continuous petrochemical process. The product is filtered at various stages in the distribution process to remove solid contaminants. Distribution processes are tightly controlled to prevent inadvertent contamination from prior cargoes.

Specification Sheet

Specification sheets are available on the LyondellBasell website http://www.lyondellbasell.com/Products/ByCategory/

Storage and Handling

Shelf Life

The shelf life of propylene glycol is two years when stored and handled under appropriate conditions.

Storage

Propylene glycol USP/EP may be stored in bulk in stainless steel tanks or in tanks constructed of mild steel with an FDA compliant lining. Unlined mild steel is not considered suitable for long-term storage of PG USP/EP because the PG USP/EP will pick up iron from the steel.

Nitrogen padding of bulk PG USP/EP storage tanks is recommended to reduce the risk of absorption of water from air and any odors that may be present in ambient air. If the risk of ambient odors is low, then a simple air drier may be used to avoid moisture intrusion.

In cold climates bulk storage tanks may be heated to facilitate pumping of PG USP/EP. Hot water or low-pressure steam is preferred for heat transfer purposes. Electrical tracing is not recommended because of the risk of scorching the product.

PG USP/EP may be stored in steel drums with an FDA compliant lining and gasket. Also FDA compliant HDPE (high density polyethylene) drums and/or IBC's may be used for storage of PG USP/EP.

Filled drums and/or IBC's should be kept tightly closed and stored in a dry environment away from strong heat or light. Polyethylene drums and/or IBC's should be kept out of sunlight and away from sources of UV light.

Storage and Handling

Storage and handling information is available on the LyondellBasell website http://www.lyondellbasell.com/Products/ByCategory/

Synoptic Document Updated to 25 July 2003

This product is listed in the "Synoptic Document" updated to 25 July 2003 under the REF Ns 23740, 81840, and 82065. It appeared in Directive A0, and A3 and in the Scientific Committee on Food (SCF) List 1 and D. The SCF provided an opinion of: ADI: 25 mg/kg b.w. (JECFA 17 M., 1973). No restrictions or specifications are listed. The Synoptic Document should be referenced for specific details.

TSCA Listing

See MSDS, section 15.

TSE - Transmissible spongiform encephalopathies

This product is manufactured by a synthetic process using only petrochemical raw materials. No materials derived from plants or animals are incorporated as raw materials, processing aids or additives.

USP

This product meets all requirements of the current edition of the United States Pharmacopeia.

VOC Content

Propylene Glycol is a Volatile Organic Compound (VOC) as defined by 40 CFR 51.100 (s)(l) with a VOC content of 8.65 lbs./gal at 25 deg C.

Disclaimer

The information in this document is, to our knowledge, true and accurate at the time and date downloaded by the user. However, information in this document may be updated periodically due to changes in laws or regulations, or for other reasons. Unless required by law, LyondellBasell will not notify users when changes are made to this document. LyondellBasell may also, at its sole discretion, notify users of other, non-regulatory, changes made to this document. Users are expected to regularly visit the PSInfo Website to obtain the most current information on this product.

Before using a product sold by a company of the LyondellBasell family of companies, users should make their own independent determination that the product is suitable for the intended use and can be used safely and legally.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY WARRANTY) OTHER THAN AS SEPARATELY AGREED TO BY THE PARTIES IN A CONTRACT.

This product(s) may not be used in:

(i) any U.S. FDA Class I, Health Canada Class I, and/or European Union Class I medical devices, without prior notification to Seller for each specific product and application; or

without prior notification to Seller for each specific product and application; of the following, without prior written approval by Seller for each specific product and application: U.S. FDA Class II medical devices; Health Canada Class II or III medical devices; European Union Class II medical devices; or any equivalent U.S. FDA, Health Canada, or European Union regulations pertaining to medical devices; packaging in direct contact with a pharmaceutical active ingredient and/or dosage form; and tobacco-related products and applications. This product(s) may not be used in the manufacture of any of the following applications: U.S. FDA Class III medical devices; Health Canada Class IV medical devices; European Class III medical devices; applications involving permanent implantation into the body; life-sustaining medical applications; and lead, asbestos or MTBE related applications. All references to the U.S. FDA, Health Canada and European Union regulations include another country's equivalent regulatory classification.

Alkylate, Arconate, Arcopure, Arcosolv, Arctic Plus, Arctic Shield, Duopac, Duoprime, Filmex, MPDIOL, Polymeg, SAA100, SAA101, TBAc, Tebol, T-Hydro, and Tufflo are trademarks owned or used by the LyondellBasell family of companies.

Arconate, Arcopure, Arcosolv, Arctic Plus, Arctic Shield, Duopac, Duoprime, Filmex, MPDIOL, Polymeg, Tebol, T-Hydro and Tufflo are registered in the U.S. Patent and Trademark Office.





LyondellBasell Product Stewardship Information Date: 1/27/2014



State of Texas County of Tarrant

On this 17 day of June 2016.
I certify that the preceding document, and the duplicate retained by me as a notarial record, are true, exact, complete, and unaltered photocopies made by me of Lyandel 134 sell froduct Stewardshif Information Propylene Glycol USP/EP 1127/2014 presented to me by the document's custodian, Alcon Laboratories, and that, to the best of my knowledge, the photocopied document is neither a public record nor a publicly recordable document, certified copies of which are available from an official source other than a notary.