



GHS SAFETY DATA SHEET

NEBANOL SOLUTION

LC997

Date Revised: 18 July 2013
Supersedes: 7/5/1994

UN GHS, 4th edition, 2011

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME: NEBANOL SOLUTION
PRODUCT USE: NO-SMELL HOLDING SOLUTION FOR BIOLOGICAL SPECIMENS
SUPPLIER: MANUFACTURER: Nebraska Scientific
3823 Leavenworth Street
Omaha, NE 68105-1180
Tel: 800-228-7117
Fax: 402-346-2216

EMERGENCY: 1-800-228-7117 (available 8:00 am – 5:00 pm U.S. Central Time Zone)

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

RISK	CATEGORY	SIGNAL WORD	RISK CLASSIFICATION	SYMBOL
ACUTE TOXICITY-ORAL	4	WARNING	MAY BE HARMFUL IF SWALLOWED	
ACUTE TOXICITY – DERMAL	4	WARNING	MAY BE HARMFUL IN CONTACT WITH SKIN	
SKIN CORROSION / IRRITATION	3	WARNING	CAUSES MILD SKIN IRRITATION	
SERIOUS EYE DAMAGE / EYE IRRITATION	2B	WARNING	CAUSES EYE IRRITATION	

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Wt. %	Occupational Exposure Limits (OSHA) TWA	Occupational Exposure Limits (ACGIH) TLV	Occupational Exposure Limits (NIOSH) REL	Carcinogenicity	U.S. EPA 313 LIST Deminimus % limit
Water		95%					
Propylene Glycol	57-55-6	<5%	Not established	Not established	Not established	Not established	Not established
Ethylene Glycol Monophenyl Ether	122-99-6	<5%	Not established	Not established	Not established	Not established	Not established

SECTION 4: FIRST AID MEASURES

Eyes: Flush with water for 15 minutes, lifting eyelids and removing contact lenses if possible. Consult a physician.

Skin: Remove contaminated clothing and shoes immediately. Rinse with plenty of water or shower. If there are effects or symptoms, consult a physician. Wash contaminated clothing before re-use.

Inhalation: Remove to fresh air. If the victim has difficulty breathing, seek medical attention immediately.

Ingestion: Rinse mouth. Give plenty of water to drink. Refer for medical attention. Never give anything by mouth to an unconscious person. Do not provide mouth-to-mouth respiration to a patient who has ingested product. Instead, use intermediate manual resuscitation equipment to provide artificial respiration.

SECTION 5: FIRE-FIGHTING MEASURES

Use powder, alcohol resistant foam, water spray or carbon dioxide. In case of fire, keep drums, etc. cool by spraying with water.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures: Wear appropriate equipment to prevent getting product on skin and clothing. Ensure adequate ventilation. Avoid breathing vapors and mists.

Environmental precautions: Collect leaking and spilled liquid in sealable containers as far as possible. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Do not let product enter drains.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

SECTION 7: HANDLING & STORAGE

Precautions for safe handling: Store in cool dry area with suitable ventilation away from direct sunlight or ultraviolet light. Avoid contact with skin and eyes. Avoid formation of vapors and mists. Wash hands after use.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Storage temperature maximum is 40°C. Obey all hazard warnings when containers are emptied.

SECTION 8: PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

Control parameters: Contains no substances with occupational exposure limit values.

Appropriate engineering controls: None needed.

Personal Protective Equipment:

Eye / Face Protection: Use eye protection with side shields tested and approved under appropriate governmental standards such as NIOSH (US) or EN 166(EU). Face shield as needed.

Skin Protection: Handle with gloves to avoid skin contact.

Respiratory protection: Respiratory protection is not required under normal conditions.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Colorless liquid	Upper Explosive Limit:	15.8%
Odor:	Slight ether	Lower Explosive Limit:	1.3%
Odor Threshold:	No data	Vapor Pressure:	no data
pH:	no data	Vapor Density:	Is heavier than air
Melting point / freezing point:	<0°C	Relative Density:	8.4 lbs / gallon (US)
Initial Boiling Point:	100°C	Solubility:	Complete
Boiling Range:	100°C - 182°C	Partition coefficient:	No data
Flash point:	100°C	Auto-ignition temp:	No data
Evaporation Rate:	Is slower than ether	Decomposition temp:	No data
Flammability:	N/A	Viscosity:	No data

SECTION 10: STABILITY & REACTIVITY

Reactivity: Avoid using in the presence of strong oxidizing agents.

Chemical stability: This product is stable under normal storage conditions.

Possibility of hazardous reactions: Will not polymerize.

Conditions to avoid: Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Avoid direct sunlight or ultraviolet sources.

Incompatible materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Aldehydes. Alcohols. Ethers. Organic acids. Hazardous decomposition products formed under fire conditions. - Carbon oxides

SECTION 11: TOXICOLOGICAL INFORMATION

Component #	Chemical Name	CAS #	Wt. %	Acute Toxicity Oral LD ₅₀	Acute Toxicity Dermal LD ₅₀	Acute Toxicity Inhalation LC ₅₀	Other
	Water		95%				
1	Propylene Glycol	57-55-6	<5%	>20,000mg/kg [Rat]	>2,000mg/kg [Rabbit]	317.042mg/l (2h) [rabbit]	No data
2	Ethylene Glycol Monophenyl Ether	122-99-6	<5%	1,260mg/kg [Rat]	14,422mg/kg [Rat]	No data	No data

No known mutagenicity effects.

Component #2 may cause reproductive disorders.

No known teratogenicity.

No known specific target organ toxicity - single exposure (GHS)

Specific target organ toxicity - repeated exposure: In rare cases, repeated excessive exposure to Component #1 may cause central nervous system effects.

Aspiration hazard: No data

Information on the likely routes of exposure: Primary route(s) of entry: Dermal, inhalation, ingestion.

Symptoms related to the physical, chemical and toxicological characteristics:

Eyes: irritation. May cause slight temporary eye irritation. Corneal injury is unlikely. Mist may cause eye irritation.

Skin: mild irritation. Harmful if absorbed through skin. Causes skin irritation.

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion: Harmful if swallowed.

Synergistic effects: No data available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Chemical Name	CAS #	Wt. %	Toxicity to Fish	Toxicity to daphnia & other aquatic invertebrates	Toxicity to algae	Toxicity in birds
Water		95%				
Propylene Glycol	57-55-6	<5%	LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 h: 40,613 mg/l	LC50, Ceriodaphnia Dubia (water flea), static test, 48 h: 18,340 mg/l Ceriodaphnia Dubia (water flea), semi-static test, 7 d, number of offspring, NOEC: 13020 mg/l	ErC50, Pseudokirchneriella subcapitata (green algae), Growth rate inhibition, 96 h: 19,000 mg/l	
Ethylene Glycol Monophenyl Ether	122-99-6	<5%	LC50 - Leuciscus idus (Golden orfe) - > 100 mg/l - 96 h			

Persistence & degradability: Product is readily biodegradable and is not expected to persist or bioconcentrate in the environment. Biodegradation rate = 100% after 20 days.

Bioaccumulative potential: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Mobility in soil: Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process. Potential for mobility in soil is very high (Koc between 0 and 50).

Other adverse effects: No observable adverse effects noted

Partition coefficient, soil organic carbon/water (Koc): < 1 Estimated.

Henry's Law Constant (H): 1.2E-08 atm*m3/mole Measured

SECTION 13: WASTE DISPOSAL CONSIDERATIONS

Disposal methods: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

SECTION 14: TRANSPORT INFORMATION

DOT (US)

Not regulated

IMDG

Not regulated

IATA

Not regulated

International and Federal DOT regulations may change from time to time. Please consult the most recent version of the relevant regulations. This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

Propylene Glycol:

==== U.S. EPA Regulations - TSCA ====

Test Rule - TSCA Section 4a

Fed. Regist. 56 #160:41212 (19 Aug 1991).

Solicitation of comments on the Interagency Testing Committee's 28th Report that recommends this substance without designating it for response by EPA within 12 mo. Recommended test(s): Developmental toxicity, and Reproductive effects. [Also reported in Pesticide Toxic Chem. News 19 #32:4 (12 Jun 1991), in Chem. Regul. Rep. 15 #10:307 (07 Jun 1991) and 15 #21:651 (23 Aug 1991), and in Chem. in Prog. Bull. 12 #3:10 (Aug. 1991). The full text also appears in Chem. Regul. Rep. 15 #21:659 (23 Aug 1991).]

Premanufacture Notice

Fed. Regist. 60 #60:16316 (29 Mar 1995). Effective date: 30 MAY 1995

Final rule to amend the polymer exemption rule to expand the exemption criteria and exempt manufacturers of eligible polymers from certain TSCA Section 5 PMN requirements. The manufacture, processing, distribution in commerce, use, and disposal of new chemical substances meeting the revised polymer exemption criteria will not present an unreasonable risk of injury to human health or the environment under the terms of exemption, according to EPA. The purpose of these final amendments is to reflect criteria developed and used by EPA to assess the hazards associated with new polymeric substances since the inception of the New Chemicals Program 15 years ago. EPA has decided that these amendments will encourage the manufacture of safer polymers by reducing industry's reporting burden for this category of chemical substances. Included in the rule are polyester polymers manufactured solely from one or more of the reactants listed in Table 1 of the rule. This substance is one of the reactants listed.

Report On Volume, Exposure, Etc.

Fed. Regist. 45 #42:13646 (29 Feb 1980).

Proposal to require manufacturers (including miners and importers) and certain processors of this substance to report production and exposure-related data, which will be used for ranking substances for investigation and for preliminary risk assessments.

Interagency Testing Committee

Fed. Regist. 56 #160:41212 (19 Aug 1991).

The Interagency Testing Committee, in its 28th Report, recommends this substance without designating it for response by EPA within 12 mo. Recommended test(s): Developmental toxicity, and Reproductive effects. [Also reported in Pesticide Toxic Chem. News 19 #32:4 (12 Jun 1991), in Chem. Regul. Rep. 15 #10:307 (07 Jun 1991) and 15 #21:651 (23 Aug 1991), and in Chem. in Prog. Bull. 12 #3:10 (Aug. 1991). The full text also appears in Chem. Regul. Rep. 15 #21:659 (23 Aug 1991).]

Substantial Risk Report

Internet: epa.gov/oppt/tsca8e/.

TSCA Section 8(e) report no: 8EHQ-0311-10104B submitted by Procter & Gamble Company. Declassification of information previously claimed as CBI in submission for 8EHQ-0890-10104 and 8EHQ-0892-10109 (EPA DCN 88-920008405 and 88-920008410).

Pesticide Toxic Chem. News 27 #19:16 (04 Mar 1999).

TSCA Section 8(e) report no. 8EHQ-0199-14354 submitted by Ciba Specialty Chemicals Water Treatments Inc., Suffolk, Va. reported the results of three mammalian toxicity studies with Alcopol, Collafix and Magnafloc. Alcopol, a wetting agent used in the textile industry, contains dioctyl sodium sulfosuccinate (CAS Reg. No.), propylene glycol (CAS Reg. No.) and ethanol (CAS Reg. No.). A single rabbit was exposed to Alcopol in an acute eye irritation test. The rabbit experienced opalescent corneal opacity, iridial inflammation, and severe conjunctival irritation. Ten rats, five of each sex, were exposed to Collafix PP2, a wallpaper adhesive containing a blend of a copolymer of acrylamide and sodium acrylate with a copolymer of acrylamide and a cationic quaternary amino ester suspended in a hydrocarbon solvent. Among the results observed were piloerection, hunched posture, waddling, and pallor of the extremities. However, no deaths occurred with a single oral dose at 5 g/kg body weight. For CFR 5651/Magnafloc 1697, the results were similar in an acute oral toxicity study with rats.

Studies on Toxicity/Exposure

Integrated Risk Information System (IRIS) (Internet: <http://www.epa.gov/iris/>) November 2009..

This substance is included in the Integrated Risk Information System program (IRIS). IRIS is prepared and maintained by the EPA's National Center for Environmental Assessment (NCEA) within the Office of Research and Development (ORD). The human health effects, such as Reference Dose for Chronic Oral Exposure (RfD) and Reference concentration for Chronic Inhalation Exposure (RfC), that may result from the exposure of these substances is included in this database.

Integrated Risk Information System (IRIS) (Internet: <http://www.epa.gov/iris/>) November 2009.

This substance is included in the Integrated Risk Information System program (IRIS). IRIS is prepared and maintained by the EPA's National Center for Environmental Assessment (NCEA) within the Office of Research and Development (ORD). The human health effects, such as Reference Dose for Chronic Oral Exposure (RfD) and Reference concentration for Chronic Inhalation Exposure (RfC), that may result from the exposure of these substances are included in this database.

Chem. Regul. Rep. 27 #7:237 (17 Feb 2003).

The National Toxicology Program's Center for the Evaluation of Risks to Human Reproduction formed a panel which concluded on Feb. 13 that there is negligible developmental and reproductive risk from exposure to propylene glycol and ethylene glycol.

Inventory Update Rule

Internet: epa.gov/oppt/iur/index.htm (2009).

This chemical was reported under the TSCA Inventory Update Rule for the 2006 reporting period.

<http://www.epa.gov/oppt/iur/index.htm> (2004).

This chemical was reported under the TSCA Inventory Update Rule for the 2002 reporting period.

<http://www.epa.gov/oppt/iur/index.htm> (01 Jan 2003).

This chemical was reported under the TSCA Inventory Update Rule for the following reporting period(s): 1986, 1990, 1994, 1998.

==== U.S. EPA Regulations - SARA ====

Superfund Amendment Reauthorization Act Section 110

Fed. Regist. 62 #247:67376 (24 Dec 1997).

Notice of availability of nine final toxicological profiles on unregulated hazardous substances prepared by the Agency for Toxic Substances and Disease Registry (ATSDR) for the Department of Defense. This substance is one of the nine substances for which a final toxicological profile has been prepared.

==== U.S. EPA Regulations - CAA ====

Clean Air Act Section 111 Volatile Organic Compounds
Code of Federal Regulations (CFR) v.40 Part 60 (1995).

This substance is designated a Volatile Organic Compound (VOC) subject to compliance with the emission standards set forth in the following subpart(s) of 40 CFR Part 60: VV, NNN, RRR.

==== U.S. EPA Regulations - FIFRA ====

EPA Pesticide Active Ingredients

Fed. Regist. 54 #34:7740 (22 Feb 89), 54 #100:22706 (25 May 89), 54 #140:30848 (24 Jul 89), 54 #204:4388 (24 Oct 89), 55 #147:31164 (31 Jul 90)

Listed Name(s): 1,2-Propanediol.

EPA Pesticide Inert Ingredients

URL: <http://www.epa.gov/opprd001/inerts/lists.html> (22 May 2002).

This substance is classified as List 4B: Inert Ingredients

Listed Name(s): Propylene glycol

Fed. Regist. 60 #130:35396 (07 Jul 1995).

List 4B: Inert Ingredients

This substance has been reclassified from List 3: Inerts of unknown toxicity.

Reclassified: 07 Jul 1995.

Listed Name(s): Propylene glycol.

EPA List of Pesticide Product Inert Ingredients (May 1995)

Listed Name(s): Propylene glycol.

==== U.S. DOT Regulations ====

DOT Coast Guard Bulk Hazardous Materials

Code of Federal Regulations (CFR) v.46 Section 30.25 and Section 150, Table I (1995)

Listed Name(s): Propylene glycol.

==== U.S. FDA Regulations ====

FDA Priority-Based Assessment of Food Additives

Priority-Based Assessment of Food Additives (PAFA) File, FDA Center for Food Safety and Applied Nutrition (CFSAN) (1998)

Listed Name(s): Propylene glycol.

FDA Food Substances Generally Recognized as Safe

Code of Federal Regulations (CFR) v.21 Section 184.1 (2010).

Code of Federal Regulations (CFR) v.21 Section 184.1 (2003).

Listed Name(s): 1,2-Propanediol

Propylene glycol.

==== Canadian Regulations ====

Canadian Legislation Affecting Chemicals

Canada Gazette, Part II, June 6, 2001.

This substance is listed on Schedule X of The New Substance Notification (NSN) Regulations promulgated under Canadian Environmental Protection Act, 1999 (CEPA, 1999). This substance is a reactant that may lead to the manufacture of polymers of low concern for which regulatory information requirements are less onerous.

WHMIS Ingredient List (Canada)

Workplace Hazardous Material Information System (WHMIS). Canada Gazette, Part II, 122(2) (01 Jan 88)

Listed Name(s): 1,2-Propylene glycol.

==== European Community Regulations ====

European Community Legislation

Official Journal of the European Union, No L 325 (11 Dec 2007).

Publication of Council Directive 98/8/EC Article 16(2) concerning the placing of biocidal products on the market. This substance is included in Annex I; classified as an existing active substance in biocidal products in accordance with the requirements of Article 3(1) or 5(2) of Regulation (EC) No 1896/2000.

Official Journal of the European Communities, No L 132 (01 Jun 1996).

Publication of Commission Decision 96/335/EC of 8 May 1996 establishing an inventory and a common nomenclature of ingredients employed in cosmetic products in accordance with Article 6(1) of the cosmetic products Directive 76/768/EEC. This substance is listed in Section I and II.

INCI Name: PROPYLENE GLYCOL/propane-1,2-diol

INN Name: propylene glycol

Function: humectants/solvents

Official Journal of the European Communities, No L 21/42 (27 Jan 1996).

Commission Directive 96/3/EC of 26 January 1996 concerning the hygiene of foodstuffs in the transport of bulk liquid oils and fats by sea. The bulk transport in seagoing vessels of liquid oils or fats which are to be processed, and which are intended for or likely to be used for human consumption, is permitted in tanks that are not exclusively reserved for the transport of foodstuffs if the tank is either stainless steel or lined with epoxy resin or technical equivalent and the immediately previous cargo transported in the tank has been a foodstuff, or a substance on the list of acceptable previous cargoes specified in the Annex to this directive. If the

tank is not stainless steel or lined with epoxy resin or technical equivalent, then the three previous cargoes must have been foodstuffs or a substance on the list given in the Annex. This substance is listed in the Annex as acceptable previous cargo. In addition to 89 specific substances listed, also listed as acceptable previous cargo are: edible grade paraffin, urea ammonia nitrate solution (UAN), potable water where the immediate previous cargo to it is listed in the Annex, animal, marine and vegetable oils and fats (other than cashew shell nut and crude tall oil), acid oils and fatty acid distillates from vegetable oils and fats and/or mixtures thereof and animal and marine fats and oils, and fatty acid esters where the ester is produced from any of the fatty acids listed in the Annex and any of the fatty alcohols listed in the Annex. The effective date of this Directive is the day following its publication in the Official Journal.

German Water Hazard Class Substance List

German Water Hazard Class Substances List, 27 Nov 2006.

This substance has been assigned a Water Hazard Classification under the June 1999 Administrative Regulation on Substances Hazardous to Waters (Verwaltungsvorschrift wassergefährdende Stoffe) in Germany.

Listed Name(s): 1,2-Propylenglykol.

Kenn-Number: 280

State of Classification: VwVwS.

German Water Hazard Classification (WGK) Number: 1.

==== Miscellaneous Regulations ====

Hazard, Toxicology, and Use Information

Agricultural Chemical

Germicide, bactericide, disinfectant

Human Data

Mutation data

Reproductive Effect

Skin / Eye Irritant (RTECS)

Miscellaneous Regulations

Chem. Regul. Rep. 27 #20:6587 (19 May 2003).

The National Toxicology Program (NTP) has released updates to earlier drafts on the developmental and reproductive risks posed by exposure to ethylene glycol and propylene glycol. Existing studies regarding the evaluation of developmental or reproductive toxicity to humans is insufficient, according to the expert panel.

Developmental effects in rats were observed at high doses. Propylene glycol does not cause developmental or reproductive toxicity in rodents; and developmental and reproductive toxicity in humans is of "negligible concern" at current estimated exposure levels, according to the panel.

National Toxicology Program Technical Reports List

Chem. Regul. Rep. 26 #10:344 (11 Mar 2002).

The reproductive risks of ethylene glycol and propylene glycol will be reviewed by an expert panel set up by the National Toxicology Program (NTP). The NTP requests additional data on the two chemical substances including: completed and planned toxicological studies, current production levels, use patterns, potential human exposures, and environmental occurrence. The deadline for panel nominations and all other pertinent data, including toxicity is May 6, 2002.

Storage/Handling/Environment

URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (01 Jun 2002).

Spillage disposal: Collect leaking and spilled liquid in sealable containers as far as possible. Wash away spilled liquid with plenty of water.

Storage: Dry. Well closed. Ventilation along the floor.

Health Hazards

URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (01 Jun 2002).

Occupational Exposure Limits: TLV not established.

Routes of Exposure: The substance can be absorbed into the body by inhalation of its vapor and by ingestion.

Inhalation Risk: A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20.deg.C.

Effects of Short-term Exposure: The substance irritates the eyes.

Effects of Long-term Exposure: Repeated or prolonged contact may cause skin sensitization.

RTECS No.: TY2000000

High Production Volume Chemicals

Internet: [oecd.org](http://www.oecd.org), October 2009.

This substance is listed on the 2007 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

2004 OECD List of High Production Volume Chemicals URL:<http://www.oecd.org> (Nov 2004).

This substance is listed on the 2004 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

NICNAS High Volume Industrial Chemicals List (HVIC) http://www.nicnas.gov.au/Industry/High_Volume_Industrial_Chemicals.asp (July 2002).

This substance is listed on the Australian High Volume Industrial Chemicals (HVIC) List. This substance was imported into Australia in a Threshold Range: Between 1,000 tons/year and 9,999 tons/year between 1999 and 2001. It is a high production volume (HPV) chemical.

ICCA Working List <http://www.cefic.org/activities/hse/mgt/hpv/hpvinit.htm> (Aug 2003).

This substance is listed on the ICCA Main Working List of High Production Volume Chemicals. This substance is considered HPV or otherwise of interest in two or more regions (i.e. North America, Europe, or Japan). This list is sponsored by the International Council of Chemical Associations (ICCA).

2000 OECD List of High Production Volume Chemicals URL:<http://www1.oecd.org/ehs/HPV.HTM> (Feb 2001).

This substance is listed on the 2000 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

1990 U.S. HPV Challenge Program Chemical List. URL: <http://www.epa.gov/chemrtk/hpvchmlt.htm> (18 Dec 2002).

This substance is listed on the U.S. HPV Challenge Program Chemical List. This substance was manufactured/imported into the United States in amounts equal to or greater than one million pounds per year. This chemical is otherwise being handled under the Organization for Economic Co-operation and development (OECD) HPV Screening Information Data Set (SIDS) Program. This chemical has a fully sponsored commitment under the HPV Challenge Program.

Commonwealth of Australia Gazette, No. C 5 (1 May 2001).

This substance is listed on the Australian High Volume Industrial Chemicals (HVIC) List - Stage 1, Manufacture. This substance was produced in Australia in volumes of over 1000 tons in 1999. It is a high production volume (HPV) chemical.

Chemical/Physical Properties

URL: <http://www.cdc.gov/niosh/ipcs/icstart.html> (01 Jun 2002).

Molecular mass: 76.09

Physical State; Appearance: COLORLESS, ODORLESS, HYGROSCOPIC, VISCOUS LIQUID

Boiling point: 188.2.deg.C

Melting point: -59.deg.C

Relative density (water = 1): 1.04

Solubility in water: miscible

Auto-ignition temperature: 371.deg.C

Vapor pressure, Pa at 20.deg.C: 10.6

Relative vapor density (air = 1): 2.6

Octanol/water partition coefficient as log Pow: -0.92

Flash point: 99.deg.C c.c.; 107.deg.C o.c.

Explosive limits, vol% in air: 2.6-12.6

OECD Screening Information Data Set Project

Internet: chem.unep.ch/irptc/sids/OECDSEIDS, December 2006.

The screening Information Data Set (SIDS) program under the auspices of the Organization for Economic Cooperation and Development (OECD) is a voluntary cooperative international testing program that began in 1989. The SIDS program is focused on developing base level testing information on international HPV chemicals. The SIDS data are used to "screen" the chemicals and set priorities for further testing or risk assessment/management activities. This substance is an HPV chemical for which a SIDS is available.

OECD SIDS Chemicals <http://www1.oecd.org/ehs/sidstable/index.htm> (Feb 2002).

The Screening Information Data Set (SIDS) program operated under the auspices of the Organization for Economic Cooperation and Development (OECD) is a voluntary cooperative international testing program that began in 1989. The SIDS program is focused on developing base level test information on approximately 600 poorly characterized international HPV chemicals. The SIDS data are used to "screen" the chemicals and set priorities for further testing or risk assessment/management activities. This substance is an HPV chemical for which a SIDS is available.

==== U.S. State Regulations ====

New Jersey Right-to-Know

Internet: web.doh.state.nj.us/rtkhsfs (August, 2010).

This substance is listed on the 2010 New Jersey Environmental Hazardous Substance List.

Pennsylvania Right-to-Know

Pennsylvania Department of Labor and Industry Hazardous Substance List 1989.

Listed Name(s): 1,2-PROPANEDIOL

Minnesota Right-to-Know

<http://www.revisor.leg.state.mn.us/arule/5206/0400.html> (21 Jun 2002).

This substance is listed on the Minnesota Hazardous Substances List

Listed Name(s): Propylene glycol.

State of Rhode Island Right-to-Know

Internet: ri.gov/DLT/righttoknow (2010).

This substance is listed on the Rhode Island Hazardous Substance List.

URL: <http://www.dlt.state.ri.us/webdev/osha/subcas.htm> (03 Nov 2003).

This substance is listed on the Rhode Island Hazardous Substance List.

Listed name(s): propylene glycol.

==== Asian and Pacific Rim Regulatory Lists and Data ====

Supplemental Data from the Japanese ENCS

Biodegradable substance.

Ethylene Glycol Monophenyl Ether:

==== U.S. EPA Regulations - TSCA ====

Test Rule - TSCA Section 4a

Fed. Regist. 52 #204:39560 (22 Oct 1987).

Receipt of the following test data on this substance during July-Sept. 1987 from a voluntary testing program by Dow Chemical Co.: Hypoxanthine-guanine-phosphoribosyl-transferase forward mutation assay in Chinese hamster ovary cells. [Test results appear in Chem. Regul. Rep. 11 #30:1163 (23 Oct 1987).]

Fed. Regist. 52 #139:27452 (21 Jul 1987).

Receipt of the following test data on this substance during Apr. 1987 from a voluntary testing program by National Distillers & Chemical Corp.: Phototoxicity, contact occlusive patches in humans (24 hr); and Repeated insult, contact occlusive patches in humans (24 hr). [A similar notice also appears in Chem. Regul. Rep. 11 #17:770 (24 Jul 1987).]

Fed. Regist. 52 #12:2151 (20 Jan 1987).

Receipt of the following test data on this substance during Oct.-Dec. 1986 from a voluntary testing program by Dow Chemical Co.: 90-Day dermal toxicity (rabbits), Dermal teratology (rabbits), and Hemolytic tests (rabbits and rats).

Fed. Regist. 50 #152:31918 (07 Aug 1985).

Receipt of data from negotiated testing program(s) with an ad hoc group of the domestic producers of this substance in lieu of requiring testing on the substance. Test(s): Dermal teratology study (rabbits).

Fed. Regist. 49 #145:30114 (26 Jul 1984).

Receipt of data from negotiated testing program(s) with an ad hoc group of U.S. producers in lieu of requiring testing on this substance. Test: Dermal teratology probe. [Also reported in TSCA Chem.-in-Prog. Bull. 5 #4:1 (Sept. 1984).]

Fed. Regist. 49 #99:21407 (21 May 1984).

Decision not to initiate rulemaking to require health effects testing on this substance for the following reason(s): an ad hoc group of producers of this substance has initiated a testing program consisting of a dermal teratology study (rabbits), and if the teratology test is negative, dermal subchronic toxicity and mutagenicity (rabbits), gene mutation in mammalian cells in culture, and in vitro cytogeneticity; these studies and existing Salmonella typhimurium/mammalian microsome assay, and mouse micronucleus assay should enable EPA to reasonably determine the potential health effects that are of concern to the Interagency Testing Committee.

Fed. Regist. 48 #106:24443 (01 Jun 1983).

Solicitation of comments on the Interagency Testing Committee's recommendation to add this substance for priority test consideration. Recommended tests: Reproductive effects, Teratogenicity, Short-term genotoxicity, Subchronic toxicity. [Also reported in TSCA Chem.-in-Prog. Bull. 4 #3:2 (May 1983).]

Report On Volume, Exposure, Etc.

Fed. Regist. 48 #121:28443 (22 Jun 1983). Effective date: 22 JUL 1983

Final Preliminary Assessment Information Rule that requires manufacturers and importers (excluding small businesses) of this substance to report production, use, and exposure data. Reporting deadline: 9/20/83.

Fed. Regist. 45 #42:13646 (29 Feb 1980).

Proposal to require manufacturers (including miners and importers) and certain processors of this substance to report production and exposure-related data, which will be used for ranking substances for investigation and for preliminary risk assessments.

Unpublished Report of Health/Safety Studies

Fed. Regist. 51 #178:32720 (15 Sep 1986). Effective date: 03 OCT 1986

Final rule that amends the model Health and Safety Data Reporting Rule by promulgating the proposals [Fed. Regist. 50 #189:39715 (30 Sep 1985)], wherein lists and copies of unpublished health and safety studies on this substance must be submitted by its past, current, or prospective manufacturers, importers, and processors. Sunset date: 7/1/93.

Fed. Regist. 50 #205:42966 (23 Oct 1985).

Correction to a notice in Fed. Regist. 50 #189:39715 (30 Sep 1985) to reflect amended name.

Fed. Regist. 50 #189:39715 (30 Sep 1985).

Proposal to amend the model Health and Safety Data Reporting Rule: (1) to lengthen the sunset provision from 3 to 10 yr in which lists and copies of unpublished health and safety studies on this substance must be submitted by its past, current, or prospective manufacturers, importers, and processors, (2) to add non-confidential studies previously submitted to federal agencies to the listing requirements, (3) to exempt from the submission and list requirements those studies previously submitted to the EPA Office of Toxic Substances (i.e., Sections 8(e) and 4, STY, and PMN submissions), (4) to require the resubmission of confidential studies, (5) to allow EPA to treat any non-confidential study previously submitted to another federal agency or EPA office other than OTS as if the study was submitted in response to Section 8(d), (6) and to exempt from the listing requirements all newly initiated studies except chronic tests, long- and short-term tests for mutagenicity, carcinogenicity, or teratogenicity, and certain biological and environmental fate tests. Proposed sunset date: 7/1/93.

Fed. Regist. 48 #106:24366 (01 Jun 1983). Effective date: 01 JUL 1983

Final rule that requires the submission of unpublished health and safety studies on this substance by its manufacturers, importers, and processors, and by others who have such studies. [Also reported in TSCA Chem.-in-Prog. Bull. 4 #4:9 (Aug. 1983).]

Interagency Testing Committee Candidate

Fed. Regist. 47 #38:8244 (25 Feb 1982).

Solicitation of comments on the selection of this substance for review by the Interagency Testing Committee for possible recommendation to EPA for testing.

Interagency Testing Committee

Fed. Regist. 49 #231:46931 (29 Nov 1984).

The Interagency Testing Committee removes this substance from the priority list, since EPA has already responded to its test recommendations.

Fed. Regist. 48 #106:24443 (01 Jun 1983).

The Interagency Testing Committee designates this substance for priority test consideration and response by EPA within 12 mo. Recommended tests: Reproductive effects, Teratogenicity, Short-term genotoxicity, Subchronic toxicity. [Also reported in TSCA Chem.-in-Prog. Bull. 4 #3:2 (May 1983).]

Substantial Risk Report

EPA number: 8EHQ-0884-0528. TSCA Chem.-in-Prog. Bull. 5 #5:8 (Nov. 1984).

Receipt of notice(s) of substantial risk: *Summary Results of Dermal Teratology and Subacute Toxicity Studies.

Inventory Update Rule

Internet: epa.gov/oppt/iur/index.htm (2009).

This chemical was reported under the TSCA Inventory Update Rule for the 2006 reporting period.

<http://www.epa.gov/oppt/iur/index.htm> (2004).

This chemical was reported under the TSCA Inventory Update Rule for the 2002 reporting period.

<http://www.epa.gov/oppt/iur/index.htm> (01 Jan 2003).

This chemical was reported under the TSCA Inventory Update Rule for the following reporting period(s): 1986, 1990, 1994, 1998.

==== U.S. EPA Regulations - CAA ====

Clean Air Act Section 111 Volatile Organic Compounds

Code of Federal Regulations (CFR) v.40 Part 60 (1995).

This substance is designated a Volatile Organic Compound (VOC) subject to compliance with the emission standards set forth in the following subpart(s) of 40 CFR Part 60: VV.

==== U.S. DOT Regulations ====

DOT Coast Guard Bulk Hazardous Materials

Code of Federal Regulations (CFR) v.46 Section 30.25 and Section 150, Table I (1995)

Listed Name(s): Ethylene glycol phenyl ether.

==== U.S. FDA Regulations ====

FDA Regulations

CFR Title 21 - Food and Drugs - URL: <http://www.fda.gov> (2004).

CFR Title: 21 CFR Part Section: 175.105

CFR Subpart: Substances for Use Only as Components of Adhesives

Listed Name(s): Ethylene glycol monophenyl ether

Use: May be safely used as components of articles intended for use in packaging, transporting & holding food as defined by 21CFR175.105.

==== Canadian Regulations ====

WHMIS Ingredient List (Canada)

Workplace Hazardous Material Information System (WHMIS). Canada Gazette, Part II, 122(2) (01 Jan 88)

Listed Name(s): Ethylene glycol monophenyl ether.

==== European Community Regulations ====

EU Classification, Labeling and Packaging Regulation (EC) No. 1272/2008

Internet: echa.europa.eu.

This is the harmonized C&L classification.

Index No. 603-098-00-9

Classification:

Hazard Class and Category Code(s): Acute Tox. 4 *; Eye Irrit. 2

Hazard Statement Code(s): H302; H319

Labelling:

Pictogram, Signal Word Code(s): GHS07; Wng

Hazard Statement Code(s): H302; H319

Official Journal of the European Communities, No. L 152 #47:1 (30 Apr 2004).

This substance classification is based on the EEC Classification, Packaging, and Labeling of Dangerous Substances Directive 67/548/EEC.

Index No.: 603-098-00-9

Listed Name(s): 2-phenoxyethanol

Classification: Xn; R22

Xi; R36

Danger Symbol(s): Xn

Risk Phrase: R: 22-36

Safety Phrase: S: (2-)26

European Community Legislation

Official Journal of the European Union, No L 226 #55:6 (22 Aug 2012).

Publication of Commission Decision of 20 August 2012 regarding Council Directive 98/8/EC Article 16(2) concerning the placing of biocidal products on the market. A new deadline of 30 September 2013 has been set for the submission of the dossier for this substance to be examined under the 14-year work programme.

Official Journal of the European Union L 36 #53:35 (09 Feb 2010).

Commission Decision of 08 February 2010 concerning the non-inclusion of certain substances in Annex I, IA or IB to Council Directive 98/8/EC of the European Parliament and of the Council concerning the placing of biocidal products on the market. This substance is not to be included in Annexes I, IA or IB to Directive 98/8/EC with regard to certain product types.

Official Journal of the European Union, No L 325 (11 Dec 2007).

Publication of Council Directive 98/8/EC Article 16(2) concerning the placing of biocidal products on the market. This substance is included in Annex I; classified as an existing active substance in biocidal products in accordance with the requirements of Article 3(1) or 5(2) of Regulation (EC) No 1896/2000.

Official Journal of the European Communities, No L 132 (01 Jun 1996).

Publication of commission Decision 96/335/EC of 8 May 1996 establishing an inventory and a common nomenclature of ingredients employed in cosmetic products in accordance with Article 6(1) of the cosmetic products Directive 76/768/EEC. This substance is listed in section I and II.

INCI Name: PHENOXYETHANOL/2-phenoxyethanol

Restriction: VI/1,29

Function: preservatives

German Water Hazard Class Substance List

German Water Hazard Class Substances List, 27 Nov 2006.

This substance has been assigned a Water Hazard Classification under the June 1999 Administrative Regulation on Substances Hazardous to Waters (Verwaltungsvorschrift wassergefährdende Stoffe) in Germany.

Listed Name(s): 2-Phenoxyethanol.

Kenn-Number: 1650

State of Classification: VwVwS.

German Water Hazard Classification (WGK) Number: 1.

==== Miscellaneous Regulations ====

Hazard, Toxicology, and Use Information

Mutation data

Skin / Eye Irritant (RTECS)

Storage/Handling/Environment

Control Number: EC Index No. 603-098-00-9. URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (31 Oct 2003).

Spillage disposal: Collect leaking and spilled liquid in sealable containers as far as possible. Absorb remaining liquid in sand or inert absorbent and remove to safe place. (Extra personal protection: filter respirator for organic gases and vapors.)

Storage: Separated from strong oxidants.

Transportation/Packaging/Labeling

Control Number: EC Index No. 603-098-00-9. URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (31 Oct 2003).

Danger Symbol(s): Xn

R Phrases: 22-36

S Phrases: (2-)26

Health Hazards

Control Number: EC Index No. 603-098-00-9. URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (31 Oct 2003).

Occupational Exposure Limits: MAK: 20 ppm, 110 mg/m³; H; Peak limitation category: I(2); Pregnancy risk group: C; (DFG 2002).

Routes of Exposure: The substance can be absorbed into the body by inhalation of its aerosol, through the skin, and by ingestion.

Inhalation Risk: A harmful contamination of the air will not or will only very slowly be reached on evaporation of this substance at 20 deg.C.

Effects of Short-term Exposure: The substance is irritating to the eyes, the skin and the respiratory tract. The substance may cause effects on the central nervous system and peripheral nervous system, resulting in impaired functions.

Effects of long-term or repeated exposure: The liquid defats the skin. The substance may have effects on the central nervous system, resulting in impaired functions.

RTECS No.: KM0350000

High Production Volume Chemicals

Internet: oecd.org, October 2009.

This substance is listed on the 2007 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

2004 OECD List of High Production Volume Chemicals URL:<http://www.oecd.org> (Nov 2004).

This substance is listed on the 2004 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

ICCA Working List <http://www.cefic.org/activities/hse/mgt/hpv/hpvinit.htm> (Aug 2003).

This substance is listed on the ICCA Main Working List of High Production Volume Chemicals. This substance is considered HPV or otherwise of interest in two or more regions (i.e. North America, Europe, or Japan). This list is sponsored by the International Council of Chemical Associations (ICCA).

2000 OECD List of High Production Volume Chemicals URL:<http://www1.oecd.org/ehs/HPV.HTM> (Feb 2001).

This substance is listed on the 2000 OECD List of High Production Volume Chemicals. This substance was produced at a level greater than 1,000 tons/year in at least one member country of the European Union. It is a high production volume (HPV) chemical.

1990 U.S. HPV Challenge Program Chemical List. URL: <http://www.epa.gov/chemrtk/hpvchmlt.htm> (18 Dec 2002).

This substance is listed on the U.S. HPV Challenge Program Chemical List. This substance was manufactured/imported into the United States in amounts equal to or greater than one million pounds per year. This chemical is otherwise being handled under the Organization for Economic Co-operation and Development (OECD) HPV Screening Information Data Set (SIDS) Program. This chemical has a fully sponsored commitment under the HPV Challenge Program.

Chemical/Physical Properties

Control Number: EC Index No. 603-098-00-9. URL:<http://www.cdc.gov/niosh/ipcs/icstart.html> (31 Oct 2003).

Molecular mass: 138.2

Physical State; Appearance: OILY COLORLESS LIQUID, WITH CHARACTERISTIC ODOR.

Boiling point: 245.deg.C

Melting point: 14.deg.C

Relative density (water = 1): 1.1

Solubility in water, g/100 ml: 2.7

Vapor pressure, kPa at 20.deg.C: 0.0013

Relative vapor density (air = 1): 4.8

Relative density of the vapor/air-mixture at 20.deg.C (air = 1): 1.0

Octanol/water partition coefficient as log Pow: 1.2

Flash point: 127.deg.C

Auto-ignition temperature: 500.deg.C

Octanol/water partition coefficient as log Pow: 1.2

OECD Screening Information Data Set Project

Internet: chem.unep.ch/irptc/sids/OECDSIDS, December 2006.

The screening Information Data Set (SIDS) program under the auspices of the Organization for Economic Cooperation and Development (OECD) is a voluntary cooperative international testing program that began in 1989. The SIDS program is focused on developing base level testing information on international HPV chemicals. The SIDS data are used to "screen" the chemicals and set priorities for further testing or risk assessment/management activities. This substance is an HPV chemical for which a SIDS is available.

OECD SIDS Chemicals <http://www1.oecd.org/ehs/sidstable/index.htm> (Feb 2002).

The Screening Information Data Set (SIDS) program operated under the auspices of the Organization for Economic Cooperation and Development (OECD) is a voluntary cooperative international testing program that began in 1989. The SIDS program is focused on developing base level test information on approximately 600 poorly characterized international HPV chemicals. The SIDS data are used to "screen" the chemicals and set priorities for further testing or risk assessment/management activities. This substance is an HPV chemical for which a SIDS is available.

SECTION 16: OTHER INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Nebraska Scientific be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Nebraska Scientific has been advised of the possibility of such damages.