SAFETY DATA SHEET

Preparation Date: 03/16/2015 **Revision Date:** 03/16/2015 **Revision Number:** G1

Product identifier

Product code: PO115
Product Name: POLYETHYLENE GLYCOL 600, NF

Other means of identification

Synonyms:

1,2-Ethanediol homopolymer
Alcox E 30
Alkox E 100
Alkox E 130
Alkox E 160
Alkox E 240
Alkox E 45
Alkox E 60
Alkox E 75
Alkox E 1000
Alkox E 15
Alkox E 150
Alkox E 400
Alkox SR
Antarox E 4000
Aquacide III
Aquaffin
Atpeg 300
BDH 301
Badimol
Bradsyn PEG
Breox 2000
Breox 20M
Breox 4000
Breox 550
Breox PEG 300
CAFO 154
Carbowax
Carbowax
Carbowax 100
Carbowax 1000
Carbowax 1350
Carbowax 14000
Carbowax 1500
Carbowax 20
Carbowax 200
Carbowax 20000
Carbowax 25000
Carbowax 300
Carbowax 3350
Carbowax 400
Carbowax 4000
Carbowax 4500
Carbowax 4600
Carbowax 600
Carbowax Sentry
DD 3002
Deactivator H
Emkapol 4200
Ethoxylated 1,2-ethanediol
Ethylene glycol homopolymer
Ethylene glycol polymer
Gafanol E 200
Glycols, polyethylene
HM 500
Lutrol
Macrogol
Merpol OJ
Miralax

Modopeg
Nosilen
Nycoline
Oxide Wax AN
Oxyethylene polymer
PEG
PEG 3350
PEG 400
PEG 4000
PEG 6000DS
Pluracol E
Pluracol E 400, E 600, E 1450
Pluriol E 200
Poly(oxy-1,2-ethanediyl, alpha-hydro-omega-hydroxy-
Poly-G
Poly-G600
Polyoxyethylene ether
alpha-Hydro-omega-hydroxypoly(oxy-1,2-ethanediyl)
alpha-Hydro-omega-hydroxypoly(oxyethylene)

CAS #: 25322-68-3
RTECS # TQ3800000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000
Order Online At: https://www.spectrumchemical.com

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC)
Not Applicable

Other hazards

Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Polyethylene Glycol 600 25322-68-3	25322-68-3	100	*

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops.

Eye Contact: Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms May cause eye/skin irritation. Ingestion may cause nausea, vomiting, and diarrhea.

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical. Carbon dioxide (CO2). Foam.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon monoxide; Carbon dioxide

Specific hazards: May be combustible at high temperatures
May be ignited by heat, sparks or flames
Container explosion may occur under fire conditions or when heated

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition.

Environmental precautions Prevent from entering into soil, ditches, sewers, waterways, and/or ground water. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth).

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Keep away from incompatible materials.

Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:
Strong oxidizing agents. Acids. Alkalis.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

U.S Occupational Exposure Limits: Not determined

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Polyethylene Glycol 600 - 25322-68-3	None	None	None	10 mg/m^3 TWA

Canada

Canada Occupational Exposure Limits: Not determined

Components	Alberta	British Columbia	Ontario	Quebec
Polyethylene Glycol 600 - 25322-68-3	None	None	None	None

Australia and Mexico

Occupational Exposure Limits for Australia and Mexico: Not determined

Components	Australia	Mexico
Polyethylene Glycol 600 25322-68-3	None	None

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles. Safety glasses with side-shields.

Skin and body protection: Long sleeved clothing. Chemical resistant apron. Gloves.

Respiratory protection: Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent. .

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state:
Liquid

Appearance:
No information available

Color:
Colorless.

Odor:
No information available

Taste
No information available

Molecular/Formula weight:
No information available

Formula:
H(OCH2Ch2)nOH

Flash point (°C):
238°C

Flashpoint (°C/°F):
238°C/ 460.4°F

Flash Point Tested according to:
Closed cup

Lower Explosion Limit (%):
No information available

Upper Explosion Limit (%):
No information available

Autoignition Temperature (°C/°F):
No information available

pH:
4.5-7.5 of a 5% Solution @ 25°C

Melting point/range(°C/°F):
17-22°C/ 63-72°F

Boiling point/range(°C/°F):
200°C/ 392°F

Decomposition temperature(°C/°F):
No information available

Bulk density:
No information available

Specific gravity:
No information available

Density (g/cm3):
1.12

Vapor pressure @ 20°C (kPa):
< 0.01 hPa (<0.01mmHg)

Evaporation rate:
No information available

Vapor density:
No information available

VOC content (g/L):
No information available

Odor threshold (ppm):
No information available

Partition coefficient (n-octanol/water):
No information available

Viscosity:
No information available

Miscibility:
No information available

Solubility:
Soluble in Water
Soluble in organic solvents
Readily soluble in aromatic hydrocarbons
Slightly soluble in aliphatic hydrocarbons

10. STABILITY AND REACTIVITY

Reactivity
Reactive with alkalis
Reactive with acids
Reacts with strong oxidizing agents

Chemical stability

Stability: Stable under recommended storage conditions

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid: Heat. Incompatible materials.

Incompatible Materials: Strong oxidizing agents. Acids. Alkalis.

Hazardous decomposition products: Carbon oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
None.

Acute Toxicity

Component Information

Polyethylene Glycol 600 - 25322-68-3

LD50/oral/rat = = 22 g/kg Oral LD50 Rat
LD50/oral/mouse = 36000 mg/kg
LD50/dermal/rat = No information available
LD50/dermal/rabbit = 20 mL/kg Dermal LD50Rabbit
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No infomation available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 30000mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 36000mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = 20mL/kg

LD50/dermal/rat
VALUE -Acute Tox Dermal = 20000mg/kg

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	May cause mild to moderate skin irritation.
Eye Contact:	May cause slight or mild eye irritation.
Inhalation	Inhalation of mist or vapors may cause respiratory tract (nose, throat), irritation.Symptoms may include coughing, shortness of breath. It may be absorbed into the blood stream with symtoms similar to ingestion. At room temperature, exposure to vapor is minimal due to low volatility. A single exposure is not likely to be hazardous. A single exposure is not likely to be hazardous.
Ingestion	May cause gastrointestinal tract irritation with nausea, vomiting, and diarrhea.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity No information available

Sensitization: No information available

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Polyethylene Glycol 600	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity No data is available

Reproductive Effects: No information available
Developmental Effects: No information available
Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure No information available
STOT - repeated exposure No information available
Target Organs: No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment. Toxic to aquatic organisms.

Polyethylene Glycol 600 - 25322-68-3
Freshwater Fish Species Data: (LC50): 5000 mg/l 24 hours

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Polyethylene Glycol 600	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	None
ERG No:	No information available
Marine Pollutant	No data available
DOT RQ (lbs):	No information available

TDG (Canada)

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Description:	No information available

ADR

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Classification Code:	No information available
Description:	No information available
CEFIC Tremcard No:	No information available

IMO / IMDG

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Description:	No information available
IMDG Page:	No information available
Marine Pollutant	No information available
MFAG:	No information available
Maximum Quantity:	No information available

RID

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Classification Code:	No information available

14. TRANSPORT INFORMATION

Description: No information available

ICAO

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

IATA

UN-No: Not Regulated
Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Risk: No information available
Packing Group: No information available
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Polyethylene Glycol 600	Present XU	Present KE-20228	Present	Present (8)-429 (7)-129 (2)-441	Not present	Present	Not present

U.S. Regulations

Polyethylene Glycol 600

Minnesota - Hazardous Substance List: Present

FDA - Direct Food Additives 21 CFR 172.210 21 CFR 172.820 21 CFR 173.310 21 CFR 173.340

FDA - 21 CFR - Total Food Additives 172.210 172.820 173.310 173.340 175.105 175.300 176.180 178.3750 73.1

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:
WARNING: This product contains a chemical known to the State of California to cause cancer. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Polyethylene Glycol 600	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting *de minimis*
Polyethylene Glycol 600	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Polyethylene Glycol 600	Not Applicable	Not Applicable

Canada

WHMIS hazard class:
Non-controlled

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
Polyethylene Glycol 600	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
Polyethylene Glycol 600	Not listed	Not listed

EU Classification

R-phrase(s)
not determined (not applicable)

S -phrase(s)
none

Components	Classification	Concentration Limits:	Safety Phrases
Polyethylene Glycol 600		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
None.

16. OTHER INFORMATION

16. OTHER INFORMATION

Preparation Date: 03/16/2015
Revision Date: 03/16/2015
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet