

=====

PAX

=====

on the Products
of
Biodegradation

****Section XIII. Disposal Considerations****

Waste Disposal Recycle to process, if possible. Consult your local or
regional authorities.

****Section XIV. Transport Information****

TDG CLASS 8: Corrosive liquid.
Classification Class 9.2: Environmentally hazardous material.

Shipping name Corrosive liquids n.o.s. (Aluminum chlorohydrate)

PIN UN1760

Packing Group III

Special No additional remark.
Provisions for
Transport

****Section XV. Other Regulatory Information****

Other Regulations OSHA: Hazardous by definition of Hazard Communication
Standard (29 CFR 1910.1200).

****Section XVI. Other Information****

References Not available.

Other Special Not available.
Considerations

Validated by Hardev Bendick on Verified by Hardev Bendick.
7/7/99.

Information EH&S Department
Contact Vancouver, B C.
 (604) 273-1441

FOR UPDATED COPIES OF AN MSDS, PLEASE CONTACT YOUR LOCAL VAN WATERS &
ROGERS LTD. BRANCH.

=====

PAX

=====

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Van Waters & Rogers Ltd. expressly disclaims all expressed or implied warranties of merchantability and fitness for a particular purpose with respect to the product provided.

===== END OF MSDS =====

[/HMIS Msds/HMIS/056/BWPML.HTM \(4 hits\)](#)

Get the most comprehensive
MSDS/HazCom program on the market!

PERCOL 763

[Product and Company Identification](#)
[Composition/Information on Ingredients](#)
[Hazards Identification](#)
[First Aid Measures](#)
[Fire Fighting Measures](#)
[Accidental Release Measures](#)
[Handling and Storage](#)
[Exposure Controls/Personal Protection](#)

[Physical and Chemical Properties](#)
[Stability and Reactivity](#)
[Toxicological Information](#)
[Ecological Information](#)
[Disposal Considerations](#)
[Transport Information](#)
[Regulatory Information](#)
[Other Information / Hazmat Info / Hazcom Label](#)

MSDS Safety Information[TOP](#)**FSC: 6850****MSDS Date: 07/16/1992 MSDS Num: BWPML****Submitter: N EN****LIIN: 00N057185****Tech Review: 02/03/1995****Status CD: C****Product PERCOL 763
ID:****MFN: 01****Article: N****Kit N
Part:****Responsible Party****Cage: 4S341****Name: ALLIED COLLOIDS INC****Address: 2301 WILROY RD****Box: 820****City: SUFFOLK****State: VA****Zip: 23439-0820****Country: US****Info Phone Number: 804-538-3700****Emergency Phone Number: 800-424-9300 (CHEMTREC)****Preparer's Name: N/P****Proprietary Ind: N
Published: Y****Review Ind: N
Special Project CD: N****Contractor Summary**[TOP](#)**Cage: 4S341****Name: ALLIED COLLOIDS INC**

Address: UNKNOWN
City: SUFFOLK

State: VA

Zip: 23434

Country: US

Phone: 804-934-3700

Ingredients

[TOP](#)

Cas: 124-04-9

Code: M

RTECS #: AU8400000 Code: M

Name: ADIPIC ACID (CERCLA)

% Text: N/K

Environmental Wt:

Other REC Limits: N/K

OSHA PEL: N/K (FP N)

Code: M

OSHA

Code:

STEL:

ACGIH TLV: 5 MG/M3; 9495

Code: M

ACGIH N/P

Code:

STEL:

EPA Rpt Qty: 5000 LBS

DOT Rpt 5000 LBS
Qty:

Ozone Depleting Chemical: N

Cas: 69418-26-4

Code: M

RTECS #: 1012342CD Code: M

Name: COPOLYMER ACRYLAMIDE:DMAEA Q. (MECL)

% Text: N/K

Environmental Wt:

Other REC Limits: N/K

OSHA PEL: N/K (FP N)

Code: M

OSHA

Code:

STEL:

ACGIH TLV: N/K (FP N)

Code: M

ACGIH N/P

Code:

STEL:

EPA Rpt Qty:

DOT Rpt
Qty:

Ozone Depleting Chemical:

Cas: 7732-18-5

Code: M

RTECS #: ZC0110000 Code: M

Name: WATER

% Text: N/K

Environmental Wt:

Other REC Limits: N/K

OSHA PEL: N/K (FP N)

Code: M

OSHA

Code:

STEL:

ACGIH TLV: N/K (FP N)

Code: M

ACGIH N/P

Code:

STEL:

EPA Rpt Qty:

DOT Rpt

Qty:

Ozone Depleting Chemical: N

Health Hazards Data

[TOP](#)

LD50 LC50 Mixture NONE SPECIFIED BY MANUFACTURER.

Route Of Entry Inds - Inhalation: YES

Skin: NO

Ingestion: NO

Carcinogenicity Inds - NTP: NO

IARC: NO

OSHA: NO

Health Hazards Acute And Chronic

ACUTE: CONTACT WITH EYE MAY PRODUCE IRRITATION AND/OR REDNESS. INHALED DUST MAY CAUSE SOME RESPIRATORY IRRITATION.

Explanation Of Carcinogenicity

NOT RELEVANT.

Signs And Symptoms Of Overexposure

SEE HEALTH HAZARDS.

Medical Cond Aggravated By Exposure

NONE SPECIFIED BY MANUFACTURER.

First Aid Information

[TOP](#)

EYE: IMMEDIATELY FLUSH WITH PLENTY OF WATER FOR @ LEAST 15 MINS. CALL PHYS.
INGEST: DO NOT GIVE AN EMETIC UNLESS DIRECTED BY PHYS. NEVER GIVE
ANYTHING BY MOUTH TO UNCON PERSON. SKIN: REMOVE CONTAMD CLTHG &
LAUNDER BEFORE REUSE. WASH AFFECTED AREA W/ SOAP & WATER. INAL: REMOVE
TO FRESH AIR.

Spill Release Procedures

[TOP](#)

PROD BECOMES SLIPPERY & DEFLECTS TO HANDLING WHEN WET; SPILLS ARE BEST HANDLED
WHILE STILL DRY. SWEEP UP & COLLECT DRY PROD. ABSORB WET PROD
W/ VERMICULITE/OTHER INERT MATL. THEN WATER WASH AREA TO WASTE
TREATMENT TO ELIMINATE SLIP HAZARD.

Neutralizing Agent

NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Methods

[TOP](#)

DISP MUST BE ARRANGED I/A/W LOCAL, ST & FED REGS. THIS MATL, WHEN UNADULTERATED, IS NOT RCRA REGULATED HAZ WASTE. HOWEVER, LOCAL DISP REGS WILL OFTEN APPLY. CARE MUST BE TAKEN TO PVNT ENVIRON CONTAM FROM DISP OF MATL, RESIDUE & CNTNRS.

Handling and Storage Precautions[TOP](#)

DO NOT GET IN EYES, ON SKIN, ON CLTHG. AVOID PRLNGD/RPTD INHAL OF DUST. AVOID PRLNGD/RPTD SKIN CONT. CAUTION -SLIP HAZS - SEE SECTION IV AND/OR VII.

Other Precautions

NONE SPECIFIED BY MANUFACTURER.

Fire and Explosion Hazard Information[TOP](#)

Flash Point Method: N/P

Flash Point:

Flash Point Text: N/A

Autoignition Temp:

Autoignition Temp Text: N/A

Lower Limits: N/A

Upper Limits: N/A

Extinguishing Media

CARBON DIOXIDE, DRY CHEMICAL OR FOAM.

Fire Fighting Procedures

NO SPEC PROCS. HOWEVER, WETTED PROD PRESENTS SLIP HAZ. PEDESTRIAN & VEHICULAR TRAFFIC MUST PROCEED W/CAUTION WHERE WET PROD MAY EXIST. NIOSH/MSHA APPRVD(SUPDAT)

Unusual Fire/Explosion Hazard

DUST IN SUFFICIENT CONCENTRATION CAN RESULT IN EXPLOSIVE MIXTURE IN AIR. HANDLE TO MINIMIZE DUSTING & ELIMINATE OPEN FLAME & OTHER SOURCES OF IGNIT.

Control Measures[TOP](#)**Respiratory Protection**

NIOSH/MSHA APPROVED DUST RESPIRATOR AS REQD TO CONTROL EXPOS. FOLLOW ANSI Z88.2.

Ventilation

PROVIDE MECH VENT TO PVNT DUST CONC, AND TO REDUCE POTNTL EXPOSURE.

Protective Gloves

IMPERVIOUS GLOVES (FP N).

Eye Protection

GOGG (ANSI Z87.1 STD; SFTY (SUPDAT)

Other Protective Equipment

PROVIDE EYEWASH STATION(S). SELECT ADDTNL PROT EQUIP (EG APRON, FACE SHIELD, ETC.), DEPENDING ON CNDTNS OF USE.

Work Hygienic Practices

WASH THORO AFTER HANDLING.

Supplemental Safety and Health

SOL IN H₂O: SOLUBLE-SOLUBILITY LIMITED BY VISCOSITY. FIRE FIGHT PROC: SCBA & FULL PROT EQUIP (FP N). HAZ DECOMP PROD: CHLORIDE VAP. VAP MAY BE IRRITATING/HARMFUL. EYE PROT: GLASSES ALONE DO NOT PROTECT FROM DUST).

Physical/Chemical Properties[TOP](#)**HCC:****NRC/State LIC No:****Net Prop WT For Ammo:****Boiling Point:****B.P. Text: N/A****Melt/Freeze Pt:****M.P/F.P Text: N/K****Decomp Temp:****Decomp Text: N/K****Vapor Pres: N/A****Vapor Density: N/A****Volatile Org Content %:****Spec Gravity: 0.8-1.0****VOC Pounds/Gallon:****PH: N/A****VOC Grams/Liter:****Viscosity: N/P****Evaporation Rate & NOT APPLICABLE****Reference:****Solubility in Water: SUPP DATA****Appearance and Odor: WHITE FREE FLOWING MICRO BEADS WITH LITTLE OR NO ODOR****Percent Volatiles by Volume: N/A****Corrosion Rate: N/K****Seton Resource Center****Allow access to non-virtual folders: 0****Reactivity Data**[TOP](#)**Stability Indicator: YES****Stability Condition To Avoid: NONE SPECIFIED BY MANUFACTURER.****Materials To Avoid: STRONG OXIDANTS SUCH AS LIQUID CHLORINE, ENRICHED GASEOUS/LIQUID OXYG, & SODIUM OR CALCIUM HYPOCHLORITE.**

Hazardous Decomposition THERMAL DECOMP/COMBUST MAY
Products: PRODUCE OXIDES OF CARBON & NITROGEN,
VARIOUS HYDROCARB, AMMONIA AND/OR
HYDROGEN (SUPDAT)

Hazardous Polymerization NO
Indicator:
Conditions To Avoid NOT RELEVANT.
Polymerization:

Toxicological Information[TO](#)**Toxicological Information:** N/P**Ecological Information**[TO](#)**Ecological:** N/P**MSDS Transport Information**[TO](#)**Transport Information:** N/P**Regulatory Information**[TO](#)**Sara Title III Information:** N/P**Federal Regulatory Information:** N/P**State Regulatory Information:** N/P**Other Information**[TO](#)**Other** N/P
Information:**HMIS HAZCOM Label**[TOP](#)**Product ID:** PERCOL 763**Cage:** 4S341**Assigned IND:** N**Company Name:** ALLIED COLLOIDS INC**Street:** UNKNOWN**PO Box:****City:** SUFFOLK**State:** VA**Zipcode:** 23434**Country:** US**Health Emergency Phone:** 800-424-9300 (CHEMTREC)

Label Required IND: Y
Status Code: C
Label Date: 02/03/1995

Date Of Label Review: 02/03/1995
MFG Label NO:
Year Procured: N/K

Origination Code: G
Eye Protection IND: YES

Chronic Hazard IND: N
Skin Protection IND: YES

Signal Word: CAUTION

Respiratory Protection IND: YES

Health Hazard: Slight
Contact Hazard: Slight

Fire Hazard: None
Reactivity Hazard: None

Hazard And Precautions

ACUTE: CONTACT WITH EYE MAY PRODUCE IRRITATION AND/OR REDNESS. INHALED DUST MAY CAUSE SOME RESPIRATORY IRRITATION. CHRONIC: NONE LISTED BY MANUFACTURER.

This information is derived from the Hazardous Material Information System which is utilized by the U.S. Department of Defense. IntraWEB, LLC and its Distributors in no manner whatsoever, expressly or implied warrants, states, or intends said information to have any application use or viability by or to any person or persons. Any person utilizing this information should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.

=====

POLYACRYLAMIDE

=====

* * * * *

* M S D S *

* *

* Canadian Centre for Occupational Health and Safety *

* * * * * Issue : 2001-1 (February, 2001) *

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 2415914

PRODUCT NAME(S) : Bio-Phore Polyacrylamide

PRODUCT IDENTIFICATION : Article number: 1610410

DATE OF MSDS : 2000-08-17

CURRENCY NOTE : This MSDS was provided to CCOHS in
electronic form on 2000-08-24

*** SUPPLIER/DISTRIBUTOR INFORMATION ***

SUPPLIER/DISTRIBUTOR : Bio-Rad Laboratories Ltd

ADDRESS : 5671 McAdam Road
Mississauga Ontario
Canada L4Z 1N9
Telephone: 905-712-2771 (Information
department: Technical services, customer
support)

EMERGENCY TELEPHONE NO. : 905-712-2771

Printing date 08/17/2000

Reviewed on 08/17/2000

+-----+

1 Identification of substance:

Product details:

Trade name: Bio-Phore Polyacrylamide

Article number: 1610410

Manufacturer/Supplier:

Bio-Rad Laboratories Ltd.

5671 McAdam Road

Mississauga, Ontario L4Z 1N9

1(905)712-2771

Information department: Technical services, customer support.

Emergency information: 1(905)712-2771

2 Composition/Data on components:

Chemical characterization

Description:

Mixture of the substances listed below with nonhazardous additions.

=====

POLYACRYLAMIDE

=====

Dangerous components:

7732-18-5 water 50-100 %
EINECS Number: 231-791-2
RTECS: ZC 0110000

25034-58-6 Polyacrylamide-co-methylene-bis-acrylamide 10-20 %
EU Number: 585-580-00-X

3 Hazards identification

Hazard description: not applicable

Information pertaining to particular dangers for man and environment
not applicable

Classification system

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

4 First aid measures

General information No special measures required.

After inhalation

Supply fresh air; consult doctor in case of complaints.

After skin contact Generally the product does not irritate the skin.

After eye contact

Rinse opened eye for several minutes under running water.

After swallowing Induce vomiting and call for medical help.

5 Fire fighting measures

Suitable extinguishing agents

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Protective equipment: No special measures required.

6 Accidental release measures

Person-related safety precautions: Not required.

Measures for environmental protection: No special measures required.

Measures for cleaning/collecting: Ensure adequate ventilation.

Additional information: No dangerous substances are released.

=====

POLYACRYLAMIDE

=====

7 Handling and storage

Handling

Information for safe handling:

No special measures required.

Ensure good ventilation/exhaustion at the workplace.

No special precautions are necessary if used correctly.

Information about protection against explosions and fires:

No special measures required.

Storage

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: None.

Storage class

Class according to regulation on flammable liquids: Void

8 Exposure controls and personal protection

Additional information about design of technical systems:

No further data; see item 7.

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information:

The lists that were valid during the creation were used as basis.

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:

Protective gloves.

Synthetic gloves

Eye protection: Not required.

9 Physical and chemical properties:

Form: Solid.

Colour: Clear

Odour: Odourless

=====

POLYACRYLAMIDE

=====

	Value/Range	Unit	Method
Change in condition			
Melting point/Melting range:	undetermined		
Boiling point/Boiling range:	100	C	
Flash point:	Not applicable		
Self igniting:	Product is not selfigniting.		
Danger of explosion:			
Product does not present an explosion hazard.			
Vapour pressure:	at 20	C	23.0 hPa
Density:	Not determined		
Solubility in / Miscibility with Water:	Fully miscible		
Solvent content:			
Organic solvents:	0.0	%	
Water:	88.0	%	
Solids content:	7.5	%	

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
Dangerous reactions No dangerous reactions known
Dangerous products of decomposition:
No dangerous decomposition products known

11 Toxicological information

Acute toxicity:
Primary irritant effect:
on the skin: No irritant effect.
on the eye: No irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

=====

POLYACRYLAMIDE

=====

12 Ecological information:

General notes: Not known to be hazardous to water.

13 Disposal considerations

Product:

Recommendation Hand over to hazardous waste disposers.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

14 Transport information

Land transport ADR/RID (cross-border)

ADR/RID class: -

Maritime transport IMDG:

IMDG Class: -

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: -

15 Regulations

Markings according to EU guidelines:

Observe the general safety regulations when handling chemicals

The product is not subject to identification regulations under EU

Directives and the Ordinance on Hazardous Materials (GefStoffV).

Safety phrases:

60 This material and its container must be disposed of as hazardous waste.

National regulations

Classification according to VbF: Void

=====

POLYACRYLAMIDE

=====

16 Other information:

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: Environmental Health and Safety.

Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Juliet Carrara, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

+-----CDN-----+

POLYETHYLENE GLYCOL

* M S D S *
*
* Canadian Centre for Occupational Health and Safety *
* ***** Issue : 2001-1 (February, 2001) *

*** IDENTIFICATION ***

MSDS RECORD NUMBER : 2453790
PRODUCT NAME(S) : POLYETHYLENE GLYCOL
PRODUCT IDENTIFICATION : MSDS NUMBER: P5029
PRODUCT CODE: U204, U214, U215, U216,
U218, U220, U221, U222, 7755, E922, H273
C.A.S. NUMBER: 25322-68-3
DATE OF MSDS : 1999-11-17
CURRENCY NOTE : This MSDS was provided to CCOHS in
electronic form on 2000-11-14

*** MANUFACTURER INFORMATION ***

MANUFACTURER : Mallinckrodt Baker, Inc
ADDRESS : 222 RED SCHOOL LANE
PHILLIPSBURG NEW JERSEY
U.S.A. 08865
Telephone: 800-582-2537 (Customer
Service)
EMERGENCY TELEPHONE NO. : 908-859-2151
800-424-9300 (CHEMTREC, USA)
703-527-3887 (Outside USA & CANADA)
613-996-6666 (CANUTEC)

*** MATERIAL SAFETY DATA ***

Effective Date: 11/17/99
Supercedes: 12/08/96

====
MSDS MATERIAL SAFETY DATA SHEET CHEMTREC: 800-424-9300 (USA)
===== 703-527-3887
From: Mallinckrodt Baker, Inc. (Outside USA & CANADA)
222 Red School Lane CANUTEC: 613-996-6666
Phillipsburg, NJ 08865
NOTE: Use CHEMTREC and CANUTEC
Emergency Telephone Number: 908-859-2151 phone numbers only in the event
of a chemical emergency.

All non-emergency questions should be directed to Customer Service
(1-800-582-2537) for assistance.

M A L L I N C K R O D T

J. T. B A K E R

POLYETHYLENE GLYCOL

1. Product Identification

Synonyms: PEG; Carbowax(R); Polyglycol; Polyethylene glycol 200, 300, 400, 600, 1000, 1450, 3350, 4000, 6000, 8000 and 20000.
CAS No: 25322-68-3
Molecular Weight: Not applicable to mixtures.
Chemical Formula: (C₂H₄O)_n.H₂O

Product Codes: J.T. Baker:
U204, U214, U215, U216, U218, U220, U221, U222
Mallinckrodt:
7755, E922, H273

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Polyethylene Glycol	25322-68-3	90 - 100%	No

3. Hazards Identification

Emergency Overview

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

J.T. Baker SAF-T-DATA(tm) Ratings (Provided here for your convenience)

Health Rating: 0 - None
Flammability Rating: 1 - Slight
Reactivity Rating: 0 - None
Contact Rating: 1 - Slight
Lab Protective Equip: GOGGLES; LAB COAT
Storage Color Code: Orange (General Storage)

Potential Health Effects

Inhalation:

No adverse health effects expected from inhalation. (May be a mechanical irritant.)

=====

POLYETHYLENE GLYCOL

=====

Ingestion:

Large doses of the lower molecular weight products may cause gastro-intestinal upset.

Skin Contact:

No adverse effects expected.

Eye Contact:

No adverse effects expected.

Chronic Exposure:

No information found.

Aggravation of Pre-existing Conditions:

Damaged skin.

=====

4. First Aid Measures

Inhalation:

Not expected to require first aid measures.

Ingestion:

If large amounts were swallowed, give water to drink and get medical advice.

Skin Contact:

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if irritation develops or persists.

Eye Contact:

In case of contact, flush eyes with plenty of water for at least 15 minutes. Get medical advice if irritation develops.

=====

5. Fire Fighting Measures

Fire:

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source. (increases as molecular weight increases). Flash point: 182 - 287 C.

Explosion:

Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

=====

POLYETHYLENE GLYCOL

=====

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

=====

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

Solid Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

Liquid Spills: Absorb with vermiculite, dry sand, earth or similar material and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer.

=====

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids, vapors, liquid); observe all warnings and precautions listed for the product.

=====

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

AIHA Workplace Environmental Exposure Level (WEEL):
10 mg/m³, 8-hour, TWA

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

POLYETHYLENE GLYCOL

Personal Respirators (NIOSH Approved):

For use with solids (not required for liquids): If the exposure limit is exceeded, a half-face dust/mist respirator may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece dust/mist respirator may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

Clear liquid or white solid.

Boiling Point:

No information found.

Odor:

Mild odor.

Melting Point:

Melting point increases as molecular weight increases:

PEG 400 = 4-8C (39-46F)

PEG 600 = 20-25C (68-77F)

PEG1500 = 44-48C (111-118F)

PEG 4000 = 54-58C (129-136F)

PEG 6000 = 56-63C (133-145F)

Solubility:

Soluble in water.

Vapor Density (Air=1):

No information found.

Density:

range: 1.1 to 1.2 (increases as molecular weight increases)

Vapor Pressure (mm Hg):

Vapor pressure is very low; as molecular weight increases, vapor pressure decreases.

pH:

No information found.

Evaporation Rate (BuAc=1):

No information found.

% Volatiles by volume @ 21C (70F):

No information found.