Printing date 03/25/2019

Agilent

Version Number 2

Reviewed on 03/25/2019

1 Identification

- · Product identifier
- · Trade name: Dipropylene Glycol
- · Part number: WRK-190M
- · CAS Number:
- 25265-71-8
- · EC number:
- 246-770-3
- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use

• Details of the supplier of the safety data sheet • Manufacturer/Supplier:

Agilent Technologies, Inc. 5301 Stevens Creek Blvd. Santa Clara, CA 95051 USA

· Information department:

Telephone: 800-227-9770 e-mail: pdl-msds_author@agilent.com • Emergency telephone number: CHEMTREC®: 1-800-424-9300

2 Hazard(s) identification

· Classification of the substance or mixture

GH

GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.

- · Label elements
- GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms



- · Signal word Danger
- Hazard-determining components of labeling: Dipropylene glycol (isomer unspecified)
- · Hazard statements
- Toxic if inhaled.
- Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area.
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a poison center/doctor.
- Specific treatment (see on this label).
- Store in a well-ventilated place. Keep container tightly closed.
- Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

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(Contd. of page 1) · Classification system: · NFPA ratings (scale 0 - 4) Health = 1Fire = 1Reactivity = 0· HMIS-ratings (scale 0 - 4) HEALTH $\frac{1}{1} Health = 1$ FIRE 1 Fire = 1**REACTIVITY** Reactivity = 0· Other hazards · Results of PBT and vPvB assessment • **PBT:** Not applicable. · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 25265-71-8 Dipropylene glycol (isomer unspecified)
- · Identification number(s)
- EC number: 246-770-3

4 First-aid measures

- · Description of first aid measures
- · General information:
- Immediately remove any clothing soiled by the product.
- Remove breathing apparatus only after contaminated clothing have been completely removed.
- In case of irregular breathing or respiratory arrest provide artificial respiration.
- · After inhalation:
- Supply fresh air or oxygen; call for doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- Special hazards arising from the substance or mixture No further relevant information available.



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· Advice for firefighters

· Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- \cdot Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- \cdot Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

· PAC-1:

Substance is not listed.

· PAC-2:

Substance is not listed.

· PAC-3:

Substance is not listed.

7 Handling and storage

· Handling:

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires: Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · 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: Keep receptacle tightly sealed.

• Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

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Safety Data Sheet acc. to OSHA HCS

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At	this time, the remaining constituent has no known exposure limits.
At	this time, the other constituents have no known exposure limits.
Ad	lditional information: The lists that were valid during the creation were used as basis.
Ex	posure controls
Pe	rsonal protective equipment:
	eneral protective and hygienic measures:
Ke	ep away from foodstuffs, beverages and feed.
	mediately remove all soiled and contaminated clothing.
	ash hands before breaks and at the end of work.
Sto	pre protective clothing separately.
	eathing equipment:
	hen used as intended with Agilent instruments, the use of the product under normal laboratory conditions and
wit	th standard practices does not result in significant airborne exposures and therefore respiratory protection is not eded.
	Ider an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved
	vice/equipment with appropriate organic or acid gas cartridge.
	otection of hands:
Alt thi	though not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil ckness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is
	ect contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times
	ceeding 4 hrs. Supplier recommendations should be followed.
	aterial of gloves
	r normal use: nitrile rubber, 11-13 mil thickness
	r direct contact with the chemical: butyl rubber, 12-15 mil thickness
	e selection of the suitable gloves does not only depend on the material, but also on further marks of quality and
	ries from manufacturer to manufacturer.
	netration time of glove material
	r normal use: nitrile rubber: 1 hour
	r direct contact with the chemical: butyl rubber: >4 hours
Ey	e protection: Goggles recommended during refilling.

Information on basic physical and chemical properties General Information				
Form:	Fluid			
Color:	Not determined.			
Odor:	Characteristic			
Odor threshold:	Not determined.			
pH-value:	Not determined.			
Change in condition				
Melting point/Melting range:	Undetermined.			
Boiling point/Boiling range:	Undetermined.			
Flash point:	130 °C (266 °F)			
Flammability (solid, gaseous):	Not applicable.			
Decomposition temperature:	Not determined.			



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Auto igniting:	Not determined.	
Danger of explosion:	Product does not present an explosion hazard.	
• Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure:	Not determined.	
· Density at 20 °C (68 °F):	1.023 g/cm ³ (8.53694 lbs/gal)	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wa	ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
VOC content:	0.00 %	
	0.0 g/l / 0.00 lb/gal	
· Other information	No further relevant information available.	

10 Stability and reactivity

• Reactivity No further relevant information available.

· Chemical stability

• Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

ATE (Acute Toxicity Estimate)

Inhalative LC50/4 h 2.34 mg/L (rat)

25265-71-8 Dipropylene glycol (isomer unspecified)

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>5,010 mg/kg (rabbit)
Inhalative	LC50/4 h	2.34 mg/L (rat)

Primary irritant effect:

• on the skin: No irritant effect.

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- on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)
- Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

- · OSHA-Ca (Occupational Safety & Health Administration)
- Substance is not listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

· UN-Number		
· DOT, ADN, IMDG, IATA	not regulated	
· UN proper shipping name		
DOT, ADN, IMDG, IATA	not regulated	





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· Transport hazard class(es)		
· DOT, ADN, IMDG, IATA · Class	not regulated	
· Packing group · DOT, IMDG, IATA	not regulated	
· Environmental hazards:	Not applicable.	
· Special precautions for user	Not applicable.	
• Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
· UN "Model Regulation":	not regulated	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

· Section 355 (extremely hazardous substances): Substance is not listed. · Section 313 (Specific toxic chemical listings): Substance is not listed. · TSCA (Toxic Substances Control Act): Substance is listed. · Proposition 65 · Chemicals known to cause cancer: Substance is not listed. · Chemicals known to cause reproductive toxicity for females: Substance is not listed. · Chemicals known to cause reproductive toxicity for males: Substance is not listed. · Chemicals known to cause developmental toxicity: Substance is not listed. · Carcinogenic categories · EPA (Environmental Protection Agency) Substance is not listed. · TLV (Threshold Limit Value established by ACGIH) Substance is not listed. · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out. (Contd. on page 8)



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16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

· Date of preparation / last revision 03/25/2019 / 1

· Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 3: Acute toxicity - Category 3 • * Data compared to the previous version altered.



Printing date 03/25/2019