

SAFETY DATA SHEET

Issue Date 20-Apr-2017

Revision Date 20-Apr-2017

Version 1

Page 1/13

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier	
Product Code(s)	
Product Name	

2464102 Gelex Secondary Turbidity Standard, 0-100 NTU

Other means of identificationSafety data sheet numberM01665

Recommended use of the chemical and restrictions on useRecommended UseLaboratory reagent.Restrictions on useNone.Uses advised againstNone

Details of the supplier of the safety data sheet

Manufacturer Address Hach Company P.O.Box 389 Loveland, CO 80539 USA (970) 669-3050

Emergency telephone number Emergency Telephone

(303) 623-5716 - 24 Hour Service (515)232-2533 - 8am - 4pm CST

Section 2: HAZARDS IDENTIFICATION

GHS Classification Most Important Hazards According to ABNT NBR 14725-2

General Hazards

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

Label elements

Signal word - None

<u>Hazard statements</u> Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

<u>Other Information</u> General Hazards Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance Not applicable

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 2 / 13

ľ	V	ľ	Ì	X	C	t	u	r	1	e	•		

Raw Material/Pure Substance

Mixture

Chemical Name	Not applicable
CAS No	Not applicable

Section 4: FIRST AID MEASURES

Description of first aid measures

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.
Ingestion	IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.
For emergency responders	
Self-protection of the first aider	Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. See section 8 for more information.
<u>Most important symptoms and effec</u> Symptoms	<u>cts, both acute and delayed</u> See Section 11: TOXICOLOGICAL INFORMATION.
Indication of any immediate medica Note to physicians	Il attention and special treatment needed Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific extinguishing methods

Evacuate area and fight fire from a safe distance.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

Product Code(s) 2464102 Issue Date 20-Apr-2017 Version 1	Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 3 / 13
For emergency responders	Use personal protection recommended in Section 8.
Environmental precautions	
Environmental precautions	Avoid release to the environment. See Section 12 for additional ecological information.
Methods and material for containm	ent and cleaning up
Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Take necessary precautions in observance of pertinent physical hazards. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.
	Section 7: HANDLING AND STORAGE
Precautions for safe handling	
Advice on safe handling	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off all contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Regular cleaning of equipment, work area and clothing is recommended.
Conditions for safe storage, includ	ing any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.
Section 8:	EXPOSURE CONTROLS/PERSONAL PROTECTION
Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies
Legend	See section 16 for terms and abbreviations
<u>Appropriate engineering controls</u> Engineering Controls	Showers Eyewash stations Ventilation systems
Individual protection measures, su Eye/face protection	<u>ch as personal protective equipment</u> . Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear protective gloves and protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	None under normal processing
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained

Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 4 / 13

Physical state		No infor	mation available			
Gas Under Pressure		Not clas	Not classified according to GHS criteria			
Appearance	No information av	ailable		Color	No information available	
Odor	Not determined			Odor threshold	No data available	
Property_			<u>Values</u>		Remarks • Method	
Molecular weight	t		No data availat	ble		
рН			No data available			
Melting point/freezing point		No data available				
Boiling point / boiling range		No data available				
Evaporation rate		No data available				
Vapor pressure		No data available				
Vapor density (air = 1)			No data available			
Specific gravity (water = 1 / air = 1)		No data availat	ble		
Partition Coeffici	ent (n-octanol/wat	er)	No data available			
Soil Organic Carbon-Water Partition Coefficient		า	No data available			
Autoignition temperature		No data available				
Decomposition temperature		No data available				
Dynamic viscosity		No data available				
Kinematic viscosity		No data availat	ble			

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
No information available	No data available	No information available

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
None reported	No information available	No data available	No information available
Other Information			
Metal Corrosivity		Not classified as corrosive to me	tal according to GHS criteria
Steel Corrosion Rate		No data available	
Aluminum Corrosion Rate		No data available	
Bulk density		No data available	

Product Code(s) 2464102 Issue Date 20-Apr-2017 Version 1	Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 5 / 13
Explosive properties	Not classified according to GHS criteria.
Explosion data	No data available
Upper explosion limit	No data available
Lower explosion limit	No data available
Flammable properties	Not classified as flammable according to GHS criteria.
Flammability Limit in Air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Flash point	No data available
Method	No information available
Oxidizing properties	Not classified according to GHS criteria.
Reactivity propeties	Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Section 10: STABILITY AND REACTIVITY

Reactivity propeties

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

Chemical stability

Stable under normal conditions.

Special dangers of the product None reported.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials None known.

Hazardous Decomposition Products None under normal use conditions.

Explosive properties

Upper explosion limit	No data available
Lower explosion limit	No data available
Autoignition temperature No data available	
Sensitivity to Mechanical Impact Sensitivity to Static Discharge	

None reported. None reported.

Section 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information	Product does not present an acute toxicity hazard based on
	known or supplied information.
Inhalation	No known effect based on information supplied.
Eye contact	No known effect based on information supplied.
Skin contact	No known effect based on information supplied.
Ingestion	No known effect based on information supplied.
Aggravated Medical Conditions	None known.
Toxicologically synergistic products	None known.
Toxicokinetics, metabolism and distribution	No information available.

Product Acute Toxicity Data

Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

Oral LD50	13,333.00 mg/kg	
Ingredient Acute Toxicity Data		
Oral Exposure Route		
Dermal Exposure Route		No data available
Inhalation (Dust/Mist) Exposure Rou	te	No data available
Inhalation (Vapor) Exposure Route		No data available
Inhalation (Gas) Exposure Route		No data available

Product Skin Corrosion/Irritation Data No data available.

Ingredient Skin Corrosion/Irritation Data

Toxicological data for ingredients is not indicative of likely harm.

Product Serious Eye Damage/Eye Irritation Data No data available.

Ingredient Eye Damage/Eye Irritation Data

Toxicological data for ingredients is not indicative of likely harm.

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 7 / 13

Sensitization Information

Product Sensitization Data	
Skin Sensitization Exposure Route	No data available.
Respiratory Sensitization Exposure Route	No data available.
Ingredient Sensitization Data	
Skin Sensitization Exposure Route	No data available.
Respiratory Sensitization Exposure Route	No data available.
Chronic Toxicity Information	
Product Repeat Dose Toxicity Data	
Oral Exposure Route	No data available.
Dermal Exposure Route	No data available.
Inhalation (Dust/Mist) Exposure Route	No data available.
Inhalation (Vapor) Exposure Route	No data available.
Inhalation (Gas) Exposure Route	No data available.
Ingredient Repeat Dose Toxicity Data	
Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available

Legend

ACGIH (American Conference of Governmental Industrial H	ygienists)	Does not apply
IARC (International Agency for Research on Cancer)		Does not apply
NTP (National Toxicology Program)		Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of Labor)		Does not apply
Product Carcinogenicity Data	No data available	
Oral Exposure Route	No data available	
Dermal Exposure Route	No data available	
Inhalation (Dust/Mist) Exposure Route	No data available	
Inhalation (Vapor) Exposure Route	No data available	

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 8 / 13

Inhalation (Gas) Exposure Route	No data available
Ingredient Carcinogenicity Data	
Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available
Product Germ Cell Mutagenicity invitro Data No data available.	
Ingredient Germ Cell Mutagenicity invitro Data	No data available
Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available
Ingredient Germ Cell Mutagenicity invivo Data	
Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available
Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available
Inhalation (Gas) Exposure Route	No data available
Ingredient Reproductive Toxicity Data	
Oral Exposure Route	No data available
Dermal Exposure Route	No data available
Inhalation (Dust/Mist) Exposure Route	No data available
Inhalation (Vapor) Exposure Route	No data available

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 9 / 13

Inhalation (Gas) Exposure Route

No data available

Section 12: ECOLOGICAL INFORMATION		
Ecotoxicity	Based on the classification principles, not classified as hazardous to the environment	
Unknown Aquatic Toxicity	0% of the mixture consists of components(s) of unknown hazards to the aquatic environment	
Product Ecological Data		
Aquatic toxicity		
Fish	No data available	
Crustacea	No data available	
Algae	No data available	
Terrestrial toxicity		
Soil	No data available	
Vertebrates	No data available	
Invertebrates	No data available	
Ingredient Ecological Data		
Aquatic toxicity		
Fish	Toxicological data for ingredients is not indicative of likely harm.	
Crustacea	Toxicological data for ingredients is not indicative of likely harm.	
Algae	Toxicological data for ingredients is not indicative of likely harm.	
Terrestrial toxicity		
Soil	No data available	
Vertebrates	No data available	
Invertebrates	No data available	
Other Information		
Persistence and degradability None known.		
Product Biodegradability Data If available, see ingredient data below.		
Ingredient Biodegradability Data Test data reported below		

Chemical Name

Test method

Biodegradation Exposure

Results

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 **Page** 10/13

				time	
Butanedioic acid, disodium salt (5 - 10%) CAS#: 150-90-3		Simulation Test - Aerobic Sewage tivated Sludge Units; B: Biofilms	None reported	None reported	Not readily biodegradable
Bioaccumulation None known.					
Product Bioaccumul	ation Data	No data avai	lable.		
Ingredient Bioaccum	nulation Data	No data avai	lable		
Additional information	on				
Product Information No data ava		lable			
Partition Coefficient (n-octanol/water) No data available					
Ingredient Information	<u>on</u>				
<u>Mobility</u> If available, see ingred	dient data below.				
Product Information		No data avai	lable		
Soil Organic Carbon-Water Partition Coefficient No data a		fficient No data avai	lable		
Ingredient Information					
Additional information					
Water solubility					
Product Information	Noi	nformation available			
Water solubility	y classification	Water solubility	W	ater Solubilit	y Temperature

Water solubility classification	<u>-rater belasinty</u>	Tator Coldsing Temperature
No information available	No data available	No information available

Ingredient Information

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS			
Waste from residues/unused products	Disposal should be in accordance with applicable regional, national, and local laws and regulations.		
Contaminated packaging	Dispose of in accordance with federal, state and local regulations. Improper disposal or reuse of this container may be dangerous and illegal.		

U.S. DOT	Not regulated		
Emergency Response Guide Number Not applicable			
IMDG	Not regulated		

Additional information

IATA

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

Not regulated

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

Section 15: REGULATORY INFORMATION

International Inventories	
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

Country Regulations

Brazil

Federal Decree No. 2.657, July 3, 1998 Standard ABNT NBR 14725-3 Ordinance No. 229, May 24, 2011 - Changes to Regulatory Standard No. 26 Standard ABNT NBR 14725-4 Resolution no. 420/2004 - ANTT Resolution no. 5.232 / 2016 - ANTT NR 15 Ministry of Labor and Employment Ordinance no. 1274 / 2003 Federal Decree 3.665 / 2000 Law no. 12.305 / 10 Law no. 10.357 / 2001

Argentina SRT 3359/2015

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 12 / 13

Resolution 801/2015 Law of Health and Safety and Work (Law 19,587) Decree 351/79 Regulatory Law 19587

Columbia

Law 253, 1996: Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. Resolution 2400/1979: Ministry of Labour and Social Security, ACGIH Exposure Limits. Decision 602, Andean Regulation for the Control of chemical substances used in the illegal manufacture of narcotic drugs and psychotropic substances. Law 29/1992: Montreal Protocol on Substances that Deplete the Ozone Layer and its Amendments. Law 55/1993: Recommendation No. 177 on the International Work Conference on Safety in the Use of Chemical Products at Work. Law 30/1990: Vienna Convention for the Protection of the Ozone Layer.

Law 55/1993: Convention No. 170 on the General Conference of the ILO.

Uruguay

Law 16.157: Approval of the Montreal Protocol on Substances that Deplete the Ozone Layer. Law 17.283: Regarding environmental protection and management of hazardous wastes. Presidential Decree 346/11: Implementation of GHS for all manufactured or distributed products. Presidential Decree 519/984: Regulates the activities relating to the use of radioactive materials and ionizing radiation throughout the country.

Ecuador

Law No. 37 - Environmental Management Act NTE INEN 2266:2013 - Requirements for Transport, Storage and Handling of Hazardous Materials Unified Text of Secondary Legislation of the Environment Ministry: Book VI

Section 16: OTHER INFORMATION

NFPA	Health hazards - 0	Flammability - 0	Instability - 0	Physical and Chemical Properties -
HMIS	Health hazards - 0	Flammability - 0	Physical Hazards - 0	Personal protection X
				See section 8 for more
				information

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH	Immediately Dangerous to Life or Health
ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
NDF	no data

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value	MAC	Maximum Allowable Concentration
Х	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN* RSP+ C M	Skin designation Respiratory sensitization Carcinogen mutagen	SKN+ ** R	Skin sensitization Hazard Designation Reproductive toxicant

Product Name Gelex Secondary Turbidity Standard, 0-100 NTU Revision Date 20-Apr-2017 Page 13 / 13

NIOSH (RTECS) Number None reported

Key literature references and sources for data See Section 11: TOXICOLOGICAL INFORMATION See Section 12: ECOLOGICAL INFORMATION

Issue Date	20-Apr-2017
Revision Date	20-Apr-2017
Revision Note	None
Restrictions on use	None

This material safety data sheet has been prepared according to Brazilian legislation and ABNT NBR 14725:2009

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY©2017

End of Safety Data Sheet