Conforms to US OSHA Hazard Communication 29CFR1910.1200

SAFETY DATA SHEET

Agilent Technologies

Torr Seal, Part Number 9530001

Section 1. Identification

1.1 Product identifier

Product name : Torr Seal, Part Number 9530001

Part no. (chemical kit) : 9530001

Part no. : Agilent Torr Seal - part A - Epoxy Resin — Not available.
Agilent Torr Seal - part B - Hardener — Not available.

Validation date : 10/3/2023

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Analytical chemistry.
Sealants and adhesives

Agilent Torr Seal - part A - Epoxy Resin	Tube 69.5 ml - 95 gr
Agilent Torr Seal - part B - Hardener	Tube 27.88 ml - 46 gr

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status :

Agilent Torr Seal - part A - Epoxy Resin	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Agilent Torr Seal - part B - Hardener	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

Agilent Torr Seal - part A - Epoxy Resin

H315	SKIN IRRITATION - Category 2
H319	EYE IRRITATION - Category 2A
H317	SKIN SENSITIZATION - Category 1
H351	CARCINOGENICITY - Category 2
H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
H411	AQUATIC HAZARD (LONG-TERM) - Category 2

Agilent Torr Seal - part B - Hardener

H330	ACUTE TOXICITY (inhalation) - Category 2
H314	SKIN CORROSION - Category 1B
H319	EYE IRRITATION - Category 2A
H317	SKIN SENSITIZATION - Category 1
H350	CARCINOGENICITY - Category 1A
H360	TOXIC TO REPRODUCTION - Category 1B
H372	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1

Section 2. Hazards identification

H411 AQUATIC HAZARD (LONG-TERM) - Category 2

Ingredients of unknown toxicity :

Agilent Torr Seal - part B - Hardener: Percentage of the mixture consisting of ingredient (s) of unknown acute inhalation toxicity: 10 - 30%

Agilent Torr Seal - part A - Epoxy Resin: Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 5%

Agilent Torr Seal - part B - Hardener: Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 19.8%

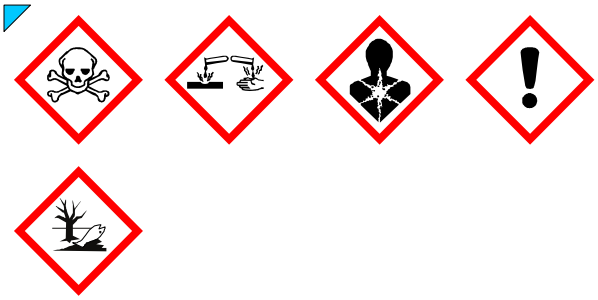
2.2 GHS label elements

Hazard pictograms :

Agilent Torr Seal - part A - Epoxy Resin



Agilent Torr Seal - part B - Hardener



Signal word :

Agilent Torr Seal - part A - Epoxy Resin: Warning

Agilent Torr Seal - part B - Hardener: Danger

Hazard statements :

Agilent Torr Seal - part A - Epoxy Resin:

H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H351 - Suspected of causing cancer.
H411 - Toxic to aquatic life with long lasting effects.

Agilent Torr Seal - part B - Hardener:

H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H330 - Fatal if inhaled.
H350 - May cause cancer.
H360 - May damage fertility or the unborn child.
H372 - Causes damage to organs through prolonged or repeated exposure.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention :

Agilent Torr Seal - part A - Epoxy Resin:

P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing and eye or face protection.
P273 - Avoid release to the environment.
P261 - Avoid breathing vapor.
P264 - Wash thoroughly after handling.

Agilent Torr Seal - part B - Hardener:

P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing and eye or face protection.

Section 2. Hazards identification

			P284 - In case of inadequate ventilation wear respiratory protection. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P270 - Do not eat, drink or smoke when using this product.
Response	:	Agilent Torr Seal - part A - Epoxy Resin	P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P362 + P364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
		Agilent Torr Seal - part B - Hardener	P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P304 + P340, P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	:	Agilent Torr Seal - part A - Epoxy Resin	P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
		Agilent Torr Seal - part B - Hardener	Not applicable.
Disposal	:		

Section 2. Hazards identification

	Agilent Torr Seal - part A - Epoxy Resin	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Agilent Torr Seal - part B - Hardener	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements :	Agilent Torr Seal - part A - Epoxy Resin	Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	Agilent Torr Seal - part B - Hardener	Do not handle until all safety precautions have been read and understood. Keep container tightly closed. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not breathe vapor or spray. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.

2.3 Other hazards

Hazards not otherwise classified :	Agilent Torr Seal - part A - Epoxy Resin	Polymerization is exothermic and can degenerate into an uncontrolled reaction.
	Agilent Torr Seal - part B - Hardener	Polymerization is exothermic and can degenerate into an uncontrolled reaction. Causes respiratory tract burns. Causes digestive tract burns.

Section 3. Composition/information on ingredients

Substance/mixture :	Agilent Torr Seal - part A - Epoxy Resin	Mixture
	Agilent Torr Seal - part B - Hardener	Mixture

Ingredient name	%	CAS number
Agilent Torr Seal - part A - Epoxy Resin		
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	≥25 - ≤50	25068-38-6
Phenol, polymer with formaldehyde, glycidyl ether	≥10 - ≤25	28064-14-4
Titanium dioxide	≤10	13463-67-7
2,2'-[methylenebis(p-phenyleneoxymethylene)]bisoxirane	<1	2095-03-6
Agilent Torr Seal - part B - Hardener		
2,2'-Iminodiethylamine	≥10 - ≤25	111-40-0
crystalline silica, respirable powder	≥10 - ≤25	14808-60-7
Bisphenol A	<2.5	80-05-7
2-piperazin-1-ylethylamine	<1	140-31-8
2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane	<1	3388-04-3

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact :

Agilent Torr Seal - part A - Epoxy Resin: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Agilent Torr Seal - part B - Hardener: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation :

Agilent Torr Seal - part A - Epoxy Resin: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Agilent Torr Seal - part B - Hardener: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact :

Agilent Torr Seal - part A - Epoxy Resin: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Agilent Torr Seal - part B - Hardener: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to

Section 4. First aid measures

			rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:	Agilent Torr Seal - part A - Epoxy Resin	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		Agilent Torr Seal - part B - Hardener	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	Agilent Torr Seal - part A - Epoxy Resin	Causes serious eye irritation.
		Agilent Torr Seal - part B - Hardener	Causes serious eye irritation.
Inhalation	:	Agilent Torr Seal - part A - Epoxy Resin	May cause respiratory irritation.
		Agilent Torr Seal - part B - Hardener	Fatal if inhaled. Corrosive to the respiratory system.
Skin contact	:	Agilent Torr Seal - part A - Epoxy Resin	Causes skin irritation. May cause an allergic skin reaction.
		Agilent Torr Seal - part B - Hardener	Causes severe burns. May cause an allergic skin reaction.
Ingestion	:	Agilent Torr Seal - part A - Epoxy Resin	No known significant effects or critical hazards.
		Agilent Torr Seal - part B - Hardener	May cause burns to mouth, throat and stomach. Corrosive to the digestive tract. Causes burns.

Over-exposure signs/symptoms

Section 4. First aid measures

Eye contact	:	Agilent Torr Seal - part A - Epoxy Resin	Adverse symptoms may include the following: pain or irritation watering redness
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: pain watering redness
Inhalation	:	Agilent Torr Seal - part A - Epoxy Resin	Adverse symptoms may include the following: respiratory tract irritation coughing
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	Agilent Torr Seal - part A - Epoxy Resin	Adverse symptoms may include the following: irritation redness
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	Agilent Torr Seal - part A - Epoxy Resin	No specific data.
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	:	Agilent Torr Seal - part A - Epoxy Resin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Agilent Torr Seal - part B - Hardener	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:	Agilent Torr Seal - part A - Epoxy Resin	No specific treatment.
		Agilent Torr Seal - part B - Hardener	No specific treatment.

Section 4. First aid measures

Protection of first-aiders	:	Agilent Torr Seal - part A - Epoxy Resin	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
		Agilent Torr Seal - part B - Hardener	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	Agilent Torr Seal - part A - Epoxy Resin	Use an extinguishing agent suitable for the surrounding fire.
		Agilent Torr Seal - part B - Hardener	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	Agilent Torr Seal - part A - Epoxy Resin	None known.
		Agilent Torr Seal - part B - Hardener	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	:	Agilent Torr Seal - part A - Epoxy Resin	Polymerization is exothermic and can degenerate into an uncontrolled reaction. In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
		Agilent Torr Seal - part B - Hardener	Polymerization is exothermic and can degenerate into an uncontrolled reaction. In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous thermal decomposition products	:	Agilent Torr Seal - part A - Epoxy Resin	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
		Agilent Torr Seal - part B - Hardener	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides

Section 5. Fire-fighting measures

5.3 Advice for firefighters

Special protective actions for fire-fighters	:	Agilent Torr Seal - part A - Epoxy Resin	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
		Agilent Torr Seal - part B - Hardener	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	:	Agilent Torr Seal - part A - Epoxy Resin	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		Agilent Torr Seal - part B - Hardener	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	Agilent Torr Seal - part A - Epoxy Resin	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
		Agilent Torr Seal - part B - Hardener	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	Agilent Torr Seal - part A - Epoxy Resin	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
		Agilent Torr Seal - part B - Hardener	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Section 6. Accidental release measures

6.2 Environmental precautions :

Agilent Torr Seal - part A - Epoxy Resin: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Agilent Torr Seal - part B - Hardener: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up :

Agilent Torr Seal - part A - Epoxy Resin: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Agilent Torr Seal - part B - Hardener: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures :

Agilent Torr Seal - part A - Epoxy Resin: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous. Do not reuse container.

Agilent Torr Seal - part B - Hardener: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or

Section 7. Handling and storage

clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Agilent Torr Seal - part A - Epoxy Resin

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Agilent Torr Seal - part B - Hardener

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Agilent Torr Seal - part A - Epoxy Resin

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Agilent Torr Seal - part B - Hardener

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Section 7. Handling and storage

Recommendations	:	Agilent Torr Seal - part A - Epoxy Resin	Industrial applications, Professional applications.
		Agilent Torr Seal - part B - Hardener	Industrial applications, Professional applications.
Industrial sector specific solutions	:	Agilent Torr Seal - part A - Epoxy Resin	Not available.
		Agilent Torr Seal - part B - Hardener	Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Agilent Torr Seal - part A - Epoxy Resin	
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	None.
Phenol, polymer with formaldehyde, glycidyl ether	None.
Titanium dioxide	**OSHA PEL 1989 (United States, 3/1989).** TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** TWA: 15 mg/m³ 8 hours. Form: Total dust **CAL OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³, (as Ti) 8 hours. Form: respirable fraction TWA: 10 mg/m³, (as Ti) 8 hours. Form: total dust **ACGIH TLV (United States, 1/2022).** TWA: 2.5 mg/m³ 8 hours. Form: respirable fraction, finescale particles
2,2'-[methylenebis(p-phenyleneoxymethylene)]bisoxirane	None.
Agilent Torr Seal - part B - Hardener	
2,2'-Iminodiethylamine	**ACGIH TLV (United States, 1/2022).** **Absorbed through skin.** TWA: 1 ppm 8 hours. TWA: 4.2 mg/m³ 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 1 ppm 8 hours. TWA: 4 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020).** **Absorbed through skin.** TWA: 1 ppm 10 hours. TWA: 4 mg/m³ 10 hours. **CAL OSHA PEL (United States, 5/2018).** **Absorbed through skin.** TWA: 4 mg/m³ 8 hours. TWA: 1 ppm 8 hours.
crystalline silica, respirable powder	**OSHA PEL Z3 (United States, 6/2016).** TWA: 250 mppcf / (%SiO2+5) 8 hours. Form: Respirable TWA: 10 mg/m³ / (%SiO2+2) 8 hours. Form: Respirable **OSHA PEL 1989 (United States, 3/1989).** TWA: 0.1 mg/m³, (as quartz) 8 hours. Form: Respirable dust **OSHA PEL (United States, 5/2018). [Silica, crystalline]** TWA: 50 µg/m³ 8 hours. Form: Respirable

Section 8. Exposure controls/personal protection

	dust **ACGIH TLV (United States, 1/2022). [Silica, crystalline]** TWA: 0.025 mg/m³ 8 hours. Form: Respirable fraction **CAL OSHA PEL (United States, 5/2018).** TWA: 0.05 mg/m³ 8 hours. **NIOSH REL (United States, 10/2020). [SILICA, CRYSTALLINE (AS RESPIRABLE DUST)]** TWA: 0.05 mg/m³ 10 hours. Form: respirable dust
Bisphenol A	None.
2-piperazin-1-ylethylamine	None.
2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane	None.

Biological exposure indices

No exposure indices known.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection : When used as intended with Agilent instruments, use of the product is not expected to result in direct contact with the chemical. However, in case of accidental contact with splash wear good quality:

Glove material: Nitrile rubber
Glove thickness: > 0.4 mm
Breakthrough time: > 480 minutes

Selection of a suitable glove depends not only on the material but also on other quality properties, which may vary from manufacturer to manufacturer.
Consult your glove manufacturer for the exact breakthrough times and comply.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Filter type: A (EN 14387)

Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state	:	Agilent Torr Seal - part A - Epoxy Resin	Liquid.
		Agilent Torr Seal - part B - Hardener	Liquid.
Color	:	Agilent Torr Seal - part A - Epoxy Resin	Off-white.
		Agilent Torr Seal - part B - Hardener	Green.
Odor	:	Agilent Torr Seal - part A - Epoxy Resin	Mild.
		Agilent Torr Seal - part B - Hardener	Ammoniacal.
Odor threshold	:	Agilent Torr Seal - part A - Epoxy Resin	Not available.
		Agilent Torr Seal - part B - Hardener	Not available.
pH	:	Agilent Torr Seal - part A - Epoxy Resin	Not available.
		Agilent Torr Seal - part B - Hardener	>7
Melting point/freezing point	:	Agilent Torr Seal - part A - Epoxy Resin	Not available.
		Agilent Torr Seal - part B - Hardener	Not available.
Boiling point, initial boiling point, and boiling range	:	Agilent Torr Seal - part A - Epoxy Resin	>260°C (>500°F)
		Agilent Torr Seal - part B - Hardener	>100°C (>212°F)
Flash point	:	Agilent Torr Seal - part A - Epoxy Resin	Open cup: >200°C (>392°F)
		Agilent Torr Seal - part B - Hardener	Closed cup: >100°C (>212°F)
Evaporation rate	:	Agilent Torr Seal - part A - Epoxy Resin	Not available.
		Agilent Torr Seal - part B - Hardener	Not available.
Flammability	:	Agilent Torr Seal - part A - Epoxy Resin	Not applicable.
		Agilent Torr Seal - part B - Hardener	Not applicable.
Lower and upper explosion limit/flammability limit	:	Agilent Torr Seal - part A - Epoxy Resin	Not available.
		Agilent Torr Seal - part B - Hardener	Not available.

Section 9. Physical and chemical properties and safety characteristics

Vapor pressure :

Ingredient name	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Agilent Torr Seal - part A - Epoxy Resin						
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	<0	<0	EU A.4	-	-	-
Agilent Torr Seal - part B - Hardener						
2,2'-Iminodiethylamine	0.16	0.021	-	-	-	-
Bisphenol A	0	0	OECD 104	0	0	OECD 104

Relative vapor density :

Agilent Torr Seal - part A - Epoxy Resin	Not available.
Agilent Torr Seal - part B - Hardener	Not available.

Relative density :

Agilent Torr Seal - part A - Epoxy Resin	1.57
Agilent Torr Seal - part B - Hardener	1.65

Solubility(ies) :

Media	Result
Agilent Torr Seal - part A - Epoxy Resin	
water	Insoluble
Agilent Torr Seal - part B - Hardener	
water	Insoluble

Partition coefficient: n-octanol/water :

Agilent Torr Seal - part A - Epoxy Resin	Not applicable.
Agilent Torr Seal - part B - Hardener	Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
Agilent Torr Seal - part B - Hardener			
2,2'-Iminodiethylamine	358	676.4	-
Bisphenol A	510	950	-

Decomposition temperature :

Agilent Torr Seal - part A - Epoxy Resin	Not available.
Agilent Torr Seal - part B - Hardener	Not available.

Viscosity :

Agilent Torr Seal - part A - Epoxy Resin	Not available.
Agilent Torr Seal - part B - Hardener	Not available.

Particle characteristics

Section 9. Physical and chemical properties and safety characteristics

Median particle size	:	Agilent Torr Seal - part A - Epoxy Resin	Not applicable.
		Agilent Torr Seal - part B - Hardener	Not applicable.

Section 10. Stability and reactivity

10.1 Reactivity	:	Agilent Torr Seal - part A - Epoxy Resin	No specific test data related to reactivity available for this product or its ingredients.
		Agilent Torr Seal - part B - Hardener	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	Agilent Torr Seal - part A - Epoxy Resin	The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information.
		Agilent Torr Seal - part B - Hardener	The product may not be stable under certain conditions of storage or use. See "Possibility of Hazardous Reactions" for further information.
10.3 Possibility of hazardous reactions	:	Agilent Torr Seal - part A - Epoxy Resin	Free radical initiators, peroxides, strongly alkaline and strongly acidic materials or reactive metals. Contact with these could result in uncontrolled exothermic polymerization. Hazardous reactions or instability may occur under certain conditions of storage or use.
		Agilent Torr Seal - part B - Hardener	Free radical initiators, peroxides, strongly alkaline and strongly acidic materials or reactive metals. Contact with these could result in uncontrolled exothermic polymerization. Hazardous reactions or instability may occur under certain conditions of storage or use.
10.4 Conditions to avoid	:	Agilent Torr Seal - part A - Epoxy Resin	No specific data.
		Agilent Torr Seal - part B - Hardener	No specific data.
10.5 Incompatible materials	:	Agilent Torr Seal - part A - Epoxy Resin	May react or be incompatible with oxidizing materials.
		Agilent Torr Seal - part B - Hardener	May react or be incompatible with oxidizing materials. acids alkalis halogenated hydrocarbons 2,2'-iminodi(ethylamine) copper alloys nickel alloys nitrosating agents
10.6 Hazardous decomposition products	:	Agilent Torr Seal - part A - Epoxy Resin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
		Agilent Torr Seal - part B - Hardener	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Agilent Torr Seal - part B - Hardener				
2,2'-Iminodiethylamine	LD50 Dermal	Rabbit	1090 mg/kg	-
	LD50 Oral	Rat	1080 mg/kg	-
Bisphenol A	LD50 Dermal	Rabbit	3600 mg/kg	-
	LD50 Oral	Rat	1200 mg/kg	-
2-piperazin-1-ylethylamine	LD50 Dermal	Rabbit - Male	866 mg/kg	-
2-(3,4-epoxycyclohexyl) ethyltrimethoxysilane	LD50 Dermal	Rabbit - Male, Female	6741 mg/kg	-
	LD50 Oral	Rat - Male, Female	13161 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Agilent Torr Seal - part A - Epoxy Resin					
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 uL	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 mg	-
Agilent Torr Seal - part B - Hardener					
2,2'-Iminodiethylamine	Skin - Moderate irritant	Rabbit	-	500 mg	-
Bisphenol A	Eyes - Severe irritant	Rabbit	-	24 hours 250 ug	-
	Skin - Mild irritant	Rabbit	-	250 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
2-piperazin-1-ylethylamine	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 5 mg	-
2-(3,4-epoxycyclohexyl) ethyltrimethoxysilane	Skin - Mild irritant	Rabbit	-	500 mg	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Section 11. Toxicological information

Product/ingredient name	OSHA	IARC	NTP
Agilent Torr Seal - part A - Epoxy Resin			
Titanium dioxide	-	2B	-
Agilent Torr Seal - part B - Hardener			
crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Agilent Torr Seal - part A - Epoxy Resin			
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	Category 3	-	Respiratory tract irritation
Phenol, polymer with formaldehyde, glycidyl ether	Category 3	-	Respiratory tract irritation
2,2'-[methylenebis(p-phenyleneoxymethylene)]bisoxirane	Category 3	-	Respiratory tract irritation
Agilent Torr Seal - part B - Hardener			
Bisphenol A	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Agilent Torr Seal - part B - Hardener			
crystalline silica, respirable powder	Category 1	inhalation	lungs
2-piperazin-1-ylethylamine	Category 1	-	-

Aspiration hazard

Not available.

Information on the likely routes of exposure :

Agilent Torr Seal - part A - Epoxy Resin: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Agilent Torr Seal - part B - Hardener: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact :

Agilent Torr Seal - part A - Epoxy Resin: Causes serious eye irritation.

Agilent Torr Seal - part B - Hardener: Causes serious eye irritation.

Inhalation :

Agilent Torr Seal - part A - Epoxy Resin: May cause respiratory irritation.

Agilent Torr Seal - part B - Hardener: Fatal if inhaled. Corrosive to the respiratory system.

Section 11. Toxicological information

Skin contact	:	Agilent Torr Seal - part A - Epoxy Resin	Causes skin irritation. May cause an allergic skin reaction.
		Agilent Torr Seal - part B - Hardener	Causes severe burns. May cause an allergic skin reaction.
Ingestion	:	Agilent Torr Seal - part A - Epoxy Resin	No known significant effects or critical hazards.
		Agilent Torr Seal - part B - Hardener	May cause burns to mouth, throat and stomach. Corrosive to the digestive tract. Causes burns.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	Agilent Torr Seal - part A - Epoxy Resin	Adverse symptoms may include the following: pain or irritation watering redness
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: pain watering redness
Inhalation	:	Agilent Torr Seal - part A - Epoxy Resin	Adverse symptoms may include the following: respiratory tract irritation coughing
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact	:	Agilent Torr Seal - part A - Epoxy Resin	Adverse symptoms may include the following: irritation redness
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	Agilent Torr Seal - part A - Epoxy Resin	No specific data.
		Agilent Torr Seal - part B - Hardener	Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Section 11. Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	:	Agilent Torr Seal - part A - Epoxy Resin	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
		Agilent Torr Seal - part B - Hardener	Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	Agilent Torr Seal - part A - Epoxy Resin	Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
		Agilent Torr Seal - part B - Hardener	May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity	:	Agilent Torr Seal - part A - Epoxy Resin	No known significant effects or critical hazards.
		Agilent Torr Seal - part B - Hardener	No known significant effects or critical hazards.
Reproductive toxicity	:	Agilent Torr Seal - part A - Epoxy Resin	No known significant effects or critical hazards.
		Agilent Torr Seal - part B - Hardener	May damage fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Agilent Torr Seal - part B - Hardener					
Agilent Torr Seal - part B - Hardener	3932.2	4254.0	N/A	2.0	N/A
2,2'-Iminodiethylamine	1080	1090	N/A	0.5	N/A
Bisphenol A	1200	3600	N/A	N/A	N/A
2-piperazin-1-ylethylamine	500	866	N/A	N/A	N/A
2-(3,4-epoxycyclohexyl)ethyltrimethoxysilane	13161	6741	N/A	N/A	N/A

Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Agilent Torr Seal - part A - Epoxy Resin			
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	Acute EC50 9.4 mg/l Fresh water	Algae	72 hours
Agilent Torr Seal - part B - Hardener			
2,2'-Iminodiethylamine	Acute LC50 53500 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 1014000 µg/l Fresh water	Fish - *Poecilia reticulata*	96 hours
Bisphenol A	Acute EC50 1.506 mg/l Marine water	Algae - *Prorocentrum minimum* - Exponential growth phase	72 hours

Section 12. Ecological information

	Acute EC50 1000 µg/l Marine water	Algae - *Skeletonema costatum*	96 hours
	Acute EC50 7.3 mg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 50.4 µg/l Marine water	Crustaceans - *Artemia sinica*	48 hours
	Acute LC50 3.5 mg/l Marine water	Fish - *Rivulus marmoratus* - Embryo	96 hours
	Chronic NOEC 2 mg/l Fresh water	Algae - *Chlorolobion braunii* - Exponential growth phase	4 days
	Chronic NOEC 10 µg/l Marine water	Crustaceans - *Tigriopus japonicus* - Nauplii	21 days
	Chronic NOEC 30 µg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	21 days
	Chronic NOEC 0.2 µg/l Fresh water	Fish - *Carassius auratus* - Adult	90 days
2-piperazin-1-ylethylamine	Acute LC50 2190000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Agilent Torr Seal - part A - Epoxy Resin				
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	OECD 301F Ready Biodegradability - Manometric Respirometry Test	5 % - Not readily - 28 days	-	-
Agilent Torr Seal - part B - Hardener				
Bisphenol A	OECD 301F Ready Biodegradability - Manometric Respirometry Test	74.7 to 81.4 % - Readily - 28 days	-	-
2-piperazin-1-ylethylamine	OECD 301F Ready Biodegradability - Manometric Respirometry Test	0 % - Not readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Agilent Torr Seal - part A - Epoxy Resin			
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	-	-	Not readily
Agilent Torr Seal - part B - Hardener			
2,2'-Iminodiethylamine	Marine water 2 to 4 days, pH 8, 20°C	-	Readily
Bisphenol A	-	-	Readily
2-piperazin-1-ylethylamine	-	-	Not readily
2-(3,4-epoxycyclohexyl) ethyltrimethoxysilane	-	-	Not readily

12.3 Bioaccumulative potential

Section 12. Ecological information

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Agilent Torr Seal - part A - Epoxy Resin			
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	2.64 to 3.78	31	Low
Agilent Torr Seal - part B - Hardener			
2,2'-Iminodiethylamine	-5.58	2.8 to 6.3	Low
Bisphenol A	3.4	20 to 67	Low
2-piperazin-1-ylethylamine	-1.48	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

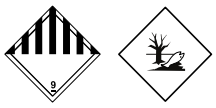
The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN3316	UN3316	UN3316	UN3316	UN3316
UN proper shipping name	Chemical kit	CHEMICAL KIT	EQUIPO QUIMICO	CHEMICAL KIT	Chemical kit

Section 14. Transport information

Transport hazard class(es)	9 	9 	9 	9 	9 
Packing group	II	II	II	II	II
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

DOT Classification : This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
Limited quantity Yes.
Packaging instruction Exceptions: 161. Non-bulk: 161. Bulk: None.
Quantity limitation Passenger aircraft/rail: 10 kg. Cargo aircraft: 10 kg.
Special provisions 15

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).
The marine pollutant mark is not required when transported by road or rail.
Passenger Carrying Road or Rail Index 10
Special provisions 65, 141

Mexico Classification : **Special provisions** 251, 340

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-A, _S-P_
Special provisions 251, 340

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: 10 kg. Packaging instructions: 960. Cargo Aircraft Only: 10 kg. Packaging instructions: 960. Limited Quantities - Passenger Aircraft: 1 kg. Packaging instructions: Y960.
Special provisions A44, A163

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Section 15. Regulatory information

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification :

Agilent Torr Seal - part A - Epoxy Resin	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 HNOC - Exothermic polymerization
Agilent Torr Seal - part B - Hardener	ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1B EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) -Category 1 HNOC - Exothermic polymerization HNOC - Corrosive to digestive tract HNOC - Corrosive to respiratory tract

Composition/information on ingredients

Name	%	Classification
Agilent Torr Seal - part A - Epoxy Resin		
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	≥25 - ≤50	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Phenol, polymer with formaldehyde, glycidyl ether	≥10 - ≤25	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Titanium dioxide	≤10	CARCINOGENICITY - Category 2
2,2'-[methylenebis(p-phenyleneoxymethylene)] bisoxirane	<1	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Agilent Torr Seal - part B - Hardener		
2,2'-Iminodiethylamine	≥10 - ≤25	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION - Category 1B EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1A HNOC - Corrosive to digestive tract HNOC - Corrosive to respiratory tract
crystalline silica, respirable powder	≥10 - ≤25	CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
Bisphenol A	<2.5	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE - Category 1

Section 15. Regulatory information

2-piperazin-1-ylethylamine	<1	SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 3 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 HNOC - Corrosive to digestive tract
2-(3,4-epoxycyclohexyl) ethyltrimethoxysilane	<1	SKIN SENSITIZATION - Category 1B GERM CELL MUTAGENICITY - Category 2 CARCINOGENICITY - Category 2

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	**Agilent Torr Seal - part B - Hardener** Bisphenol A	80-05-7	<2.5
Supplier notification	**Agilent Torr Seal - part B - Hardener** Bisphenol A	80-05-7	<2.5

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: DIETHYLENE TRIAMINE; SILICA, CRYSTALLINE, QUARTZ; TITANIUM DIOXIDE; 4,4'-ISOPROPYLIDENEDIPHENOL

New York : None of the components are listed.

New Jersey : The following components are listed: DIETHYLENE TRIAMINE; SILICA, QUARTZ; TITANIUM DIOXIDE; BISPHENOL A

Pennsylvania : The following components are listed: 1,2-ETHANEDIAMINE, N-(2-AMINOETHYL)-; QUARTZ DUST; TITANIUM OXIDE; 4,4'-ISOPROPYLIDENEDIPHENOL

California Prop. 65

⚠ **WARNING**: This product can expose you to chemicals including Silica, crystalline and Titanium dioxide, which are known to the State of California to cause cancer, and Bisphenol A, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Agilent Torr Seal - part A - Epoxy Resin Titanium dioxide	- 	-
Agilent Torr Seal - part B - Hardener Silica, crystalline Bisphenol A	 - -	 - Yes.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 15. Regulatory information

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : Not determined.

Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
Agilent Torr Seal - part A - Epoxy Resin	
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method
Agilent Torr Seal - part B - Hardener	
ACUTE TOXICITY (inhalation) - Category 2	Calculation method
SKIN CORROSION - Category 1B	Calculation method
EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
CARCINOGENICITY - Category 1A	Calculation method
TOXIC TO REPRODUCTION - Category 1B	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method

History

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Section 16. Other information

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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