

# SAFETY DATA SHEET

## DAB and DAB plus Chromogen Solution

### Section 1. Identification

#### 1.1 Product identifier

- Product name** : DAB and DAB plus Chromogen Solution
- Part no.** : GE001, GV800, GV823, GV825, K5204, K5207, K0620, K1492, K1494, K1497, K3467, K3468, K3954, K4006, K4007, K4010, K4011, K4065, K4071, K5001, K5007, K5361, K6807, K8000, K8002, K8010, K8012, K8023, K8024, SK001, SK005, SK006, SK050, SK110, SK310
- Validation date** : 7/15/2020

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

- Material uses** :  Laboratory use
- Container type: Bottle
- GE001 // EnVision FLEX DAB+ Chromogen (Dako Omnis) // HercepTest mAb pharmDx // 1 x 1 mL
- GV800 // EnVision FLEX DAB+ Chromogen (Dako Omnis) // EnVision FLEX, High pH (Dako Omnis) // 8 x 1 mL
- GV823 // EnVision FLEX DAB+ Chromogen (Dako Omnis) // EnVision FLEX Mini Kit, High pH (Dako Omnis) // 2 x 1 mL
- GV825 // EnVision FLEX DAB+ Chromogen (Dako Omnis) // EnVision FLEX DAB+ Substrate Chromogen System (Dako Omnis) // 2 x 1 mL
- K5204 // DAB Chromogen // HercepTest // 1 x 0,5 mL
- K5207 // DAB Chromogen // HercepTest for the Dako Autostainer // 3 x 3 mL
- K0620 // DAB Chromogen // Dako GenPoint, Tyramide Signal Amplification System for Biotinylated Probes // 1 x 0,2 mL
- K1492 // DAB+ Chromogen // EGFR pharmDx // 1 x 1 mL
- K1494 // DAB+ Chromogen // EGFR pharmDx for the Dako Autostainer // 2 x 3 mL
- K1497 // DAB Chromogen // CSA II Biotin-free Tyramide Signal Amplification System // 1 x 1 mL
- K3467 // DAB+ Chromogen // Dako Liquid DAB+ Substrate Chromogen System // 1 x 1 mL
- K3468 // DAB+ Chromogen // Dako Liquid DAB+ Substrate Chromogen System // 1 x 5 mL
- K3954 // DAB+ Chromogen // Dako ARK (Animal Research Kit), Peroxidase for Mouse Primary Antibodies // 1 x 1 mL
- K4006 // DAB+ Chromogen // Dako EnVision+ System-HRP (DAB), For Use With Mouse Primary Antibodies // 1 x 1 mL
- K4007 // DAB+ Chromogen // Dako EnVision+ System-HRP (DAB), For Use With Mouse Primary Antibodies // 1 x 5 mL
- K4010 // DAB+ Chromogen // Dako EnVision+ System-HRP (DAB), For Use With Rabbit Primary Antibodies // 1 x 1 mL
- K4011 // DAB+ Chromogen // Dako EnVision+ System-HRP (DAB), For Use With Rabbit Primary Antibodies // 1 x 5 mL
- K4065 // DAB+ Chromogen // Dako EnVision+ Dual Link System-HRP (DAB+) // 1 x 1 mL
- K4071 // ER/PR pharmDx DAB+ Chromogen // Dako ER/PR pharmDx Kit for the Dako Autostainer // 2 x 3 mL
- K5001 // Dako REAL DAB+ Chromogen // Dako REAL Detection System, Peroxidase/DAB+, Rabbit/Mouse // 1 x 5 mL
- K5007 // DAB+ Chromogen (x 50) // Dako REAL EnVision Detection System, Peroxidase/DAB+, Rabbit/Mouse // 1 x 5 mL
- K5361 // DAB+ Chromogen // EnVision G|2 Doublestain System, Rabbit/Mouse (DAB+/Permanent Red) // 1 x 1,5 mL
- K6807 // EnVision DuoFLEX DAB+ Chromogen // EnVision DuoFLEX Doublestain System (Dako Autostainer / Autostainer Plus) // 1 x 1,8 mL
- K8000 // EnVision FLEX DAB+ Chromogen // EnVision FLEX, High pH, (Link) // 3 x 3 mL
- K8002 // EnVision FLEX DAB+ Chromogen // EnVision FLEX+, Mouse, High pH, (Link) // 3 x 3 mL
- K8010 // EnVision FLEX DAB+ Chromogen // EnVision FLEX, High pH, (Dako Autostainer / Autostainer Plus) // 3 x 3 mL
- K8012 // EnVision FLEX DAB+ Chromogen // EnVision FLEX+, Mouse, High pH, (Dako

## Section 1. Identification

Autostainer / Autostainer Plus) // 3 x 3 mL  
K8023 // EnVision FLEX DAB+ Chromogen // EnVision FLEX Mini Kit, High pH, (Link) // 1 x 3 mL  
K8024 // EnVision FLEX DAB+ Chromogen // EnVision FLEX Mini Kit, High pH, (Dako Autostainer / Autostainer Plus) // 1 x 3 mL  
SK001 // HercepTest DAB Chromogen // HercepTest for Automated Link Platforms // 1 x 1 mL  
SK005 // DAB+ Chromogen // PD-L1 IHC nivolumab pharmDx // 1 x 5 mL  
SK006 // DAB+ Chromogen // PD-L1 IHC 22C3 pharmDx // 1 x 5 mL  
SK050 // DAB+ Chromogen // Her2Low Test // 3 mL  
SK110 // EnVision DuoFLEX DAB+ Chromogen // EnVision DuoFLEX Doublestain System, (link) // 1 x 2,16 mL  
SK310 // ER/PR pharmDx DAB+ Chromogen // ER/PR pharmDx Kit for Automated Link Platforms // 1 x 2 mL  
Reference number: SDS086

### 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  
Tel: +1 800 227 9770

Agilent Technologies Singapore (International) Pte Ltd.  
No. 1 Yishun Avenue 7  
Singapore, 768923  
Tel. (65) 6276 2622

Agilent Technologies Denmark ApS  
Produktionsvej 42  
2600 Glostrup,  
Denmark  
Tel. +45 44 85 95 00

www.Agilent.com

**e-mail address of person responsible for this SDS** : SDS@Agilent.com

### 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** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Classification of the substance or mixture

H319 EYE IRRITATION - Category 2A  
H341 GERM CELL MUTAGENICITY - Category 2  
H350 CARCINOGENICITY - Category 1B

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5%

### 2.2 GHS label elements

## Section 2. Hazards identification

### Hazard pictograms



### Signal word

: Danger

### Hazard statements

: H319 - Causes serious eye irritation.  
 H341 - Suspected of causing genetic defects.  
 H350 - May cause cancer.

### Precautionary statements

#### Prevention

: P201 - Obtain special instructions before use.  
 P202 - Do not handle until all safety precautions have been read and understood.  
 P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.  
 P264 - Wash hands thoroughly after handling.

#### Response

: P308 + P313 - IF exposed or concerned: Get medical 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 attention.

#### Storage

: P405 - Store locked up.

#### Disposal

: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

### 2.3 Other hazards

#### Hazards not otherwise classified

: None known.

## Section 3. Composition/information on ingredients

### Substance/mixture

: Mixture

Ingredient name	%	CAS number
Propane-1,2-diol	≥75 - ≤90	57-55-6
3,3-Diaminobenzidine tetrahydrochloride	<10	868272-85-9

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 as hazardous to health or the environment 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

: 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.

#### Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 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.

## Section 4. First aid measures

- Skin contact** : Flush contaminated skin with plenty of 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

### 4.2 Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

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

- Notes to physician** : 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** : No specific treatment.
- Protection of first-aiders** : 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** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

### 5.2 Special hazards arising from the substance or mixture

- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.

## Section 5. Fire-fighting measures

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
halogenated compounds

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : 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.

**Special protective equipment for fire-fighters** : 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** : 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : 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".

**6.2 Environmental precautions** : 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).

### 6.3 Methods and materials for containment and cleaning up

**Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. 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** : Put on appropriate personal protective equipment (see Section 8). 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. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : 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** : Specific storage conditions: Please consult the label.

## Section 7. Handling and storage

Store in accordance with local regulations. 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)

- Recommendations** : Industrial applications, Professional applications.  
**Industrial sector specific solutions** : Not applicable.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Propane-1,2-diol	<b>AIHA WEEL (United States, 7/2018).</b> TWA: 10 mg/m <sup>3</sup> 8 hours.
3,3-Diaminobenzidine tetrahydrochloride	None.

### 8.2 Exposure controls

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor or mist, 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. 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.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- 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.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

- Physical state** : Liquid.
- Color** : Amber.
- Odor** : Not available.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : Not available.
- Flash point** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not applicable.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : Not available.
- Relative density** : Not available.
- Solubility** : Soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.

## Section 10. Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Sensitive to light. Keep away from heat. Protect from moisture.
- 10.5 Incompatible materials** : May react or be incompatible with oxidizing materials.
- 10.6 Hazardous decomposition products** : 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
Propane-1,2-diol	LD50 Dermal	Rabbit	20800 mg/kg	-
	LD50 Oral	Rat	20 g/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Propane-1,2-diol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	100 mg	-

#### Sensitization

Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

**Information on the likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
 pain or irritation  
 watering  
 redness  
**Inhalation** : No specific data.  
**Skin contact** : No specific data.  
**Ingestion** : No specific data.



## Section 11. Toxicological information

### 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.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : Suspected of causing genetic defects.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### 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)
DAB and DAB plus Chromogen Solution	10000	N/A	N/A	N/A	N/A
Propane-1,2-diol	20000	20800	N/A	N/A	N/A
3,3-Diaminobenzidine tetrahydrochloride	500	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Propane-1,2-diol	Acute EC50 >110 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1020000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia	48 hours
	Acute LC50 710000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Propane-1,2-diol	301F Ready Biodegradability - Manometric Respirometry Test	98.3 % - Readily - 28 days	100 mg/l DOC	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Propane-1,2-diol	-	-	Readily

## Section 12. Ecological information

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Propane-1,2-diol	-1.07	-	low

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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 / TDG / Mexico / IMDG / IATA** : Not regulated.

**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

**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** : EYE IRRITATION - Category 2A  
GERM CELL MUTAGENICITY - Category 2  
CARCINOGENICITY - Category 1B

##### Composition/information on ingredients

Name	%	Classification
Propane-1,2-diol 3,3-Diaminobenzidine tetrahydrochloride	≥75 - ≤90 <10	EYE IRRITATION - Category 2B ACUTE TOXICITY (oral) - Category 4 EYE IRRITATION - Category 2A GERM CELL MUTAGENICITY - Category 2 CARCINOGENICITY - Category 1B

### State regulations

**Massachusetts** : None of the components are listed.

**New York** : None of the components are listed.

**New Jersey** : The following components are listed: PROPYLENE GLYCOL; 1,2-PROPANEDIOL

**Pennsylvania** : The following components are listed: 1,2-PROPANEDIOL

#### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### 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.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

## Section 15. Regulatory information

### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

<b>Australia</b>	: Not determined.
<b>Canada</b>	: Not determined.
<b>China</b>	: Not determined.
<b>Europe</b>	: Not determined.
<b>Japan</b>	: <b>Japan inventory (ENCS):</b> Not determined. <b>Japan inventory (ISHL):</b> Not determined.
<b>New Zealand</b>	: Not determined.
<b>Philippines</b>	: Not determined.
<b>Republic of Korea</b>	: Not determined.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

## Section 16. Other information

### History

**Date of issue** : 07/15/2020

**Date of previous issue** : 05/19/2020

**Version** : 5.1

### 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

### Procedure used to derive the classification

Classification	Justification
EYE IRRITATION - Category 2A	Calculation method
GERM CELL MUTAGENICITY - Category 2	Calculation method
CARCINOGENICITY - Category 1B	Calculation method

Indicates information that has changed from previously issued version.

### Notice to reader

**Disclaimer:** The information contained in this document is based on Dako 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.