

SAFETY DATA SHEET

Diff Quik® Set

SDS #: duhm0006

Section 1. Identification

Product identifier : Diff Quik® Set
Product code : 130832, B4132-1A, 10445586, 10459382
Product type : Liquid.

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

Not applicable.

Manufacturer : Medion Grifols Diagnostics AG
 Bonnstrasse 9
 CH-3186 Düringen
 Switzerland
 Tel.: (+41) 26 492 8702
 Fax: (+41) 26 492 8656

Supplier : Siemens Healthcare Diagnostics Inc.
 511 Benedict Avenue
 Tarrytown, NY 10591-5097 USA
 1-877-229-3711
 (800) 424-9300 (CHEMTREC) (24/365)

Section 2. Hazards identification

OSHA/HCS status	: Diff Quik Fixative Solution	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	Diff-Quik Solution I	
	Diff-Quik Solution II	
Classification of the substance or mixture	: Diff Quik Fixative Solution	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 Not classified. Not classified.
	Diff-Quik Solution I	
	Diff-Quik Solution II	
Additional information	: Not available.	
	Not available.	

GHS label elements

Section 2. Hazards identification

Hazard pictograms



Signal word

: Diff Quik Fixative Solution
Diff-Quik Solution I
Diff-Quik Solution II

Danger
No signal word.
No signal word.

Hazard statements

: Diff Quik Fixative Solution

Diff-Quik Solution I

Diff-Quik Solution II

H225 - Highly flammable liquid and vapor.
H331 - Toxic if inhaled.
H370 - Causes damage to organs.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Precautionary statements

Prevention

: Diff Quik Fixative Solution

Diff-Quik Solution I
Diff-Quik Solution II

P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P233 - Keep container tightly closed.
P271 - Use only outdoors or in well-ventilated area.
P260 - Do not breathe vapor.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash hands thoroughly after handling.
Not applicable.
Not applicable.

Response

: Diff Quik Fixative Solution

Diff-Quik Solution I
Diff-Quik Solution II

P307 + P311 - IF exposed: Call a POISON CENTER or physician.
P304 + P340 + P311 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Not applicable.
Not applicable.

Storage

: Diff Quik Fixative Solution

Diff-Quik Solution I
Diff-Quik Solution II

P403 - Store in a well-ventilated place.
P235 + P410 - Keep cool and protect from sunlight.
Not applicable.
Not applicable.

Disposal

: Diff Quik Fixative Solution

Diff-Quik Solution I
Diff-Quik Solution II

P501 - Dispose of contents and container in accordance with all local, regional, and national regulations.
Not applicable.
Not applicable.

Supplemental label elements

: Diff Quik Fixative Solution
Diff-Quik Solution I
Diff-Quik Solution II

None known.
None known.
None known.

Hazards not otherwise classified

: Diff Quik Fixative Solution
Diff-Quik Solution I
Diff-Quik Solution II

None known.
None known.
None known.

Section 3. Composition/information on ingredients

Substance/mixture	: Diff Quik Fixative Solution	Mixture
	Diff-Quik Solution I	Mixture
	Diff-Quik Solution II	Mixture

Ingredient name	%	CAS number
Diff Quik Fixative Solution methanol	>50	67-56-1
Diff-Quik Solution I sodium azide	0.095	26628-22-8

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

Description of necessary first aid measures

Eye contact	: Diff Quik Fixative Solution	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. If necessary, call a poison center or physician.
	Diff-Quik Solution I	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	Diff-Quik Solution II	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: Diff Quik Fixative Solution	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.
	Diff-Quik Solution I	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Diff-Quik Solution II	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Section 4. First aid measures

Skin contact	: Diff Quik Fixative Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	Diff-Quik Solution I	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Diff-Quik Solution II	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Diff Quik Fixative Solution	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. If necessary, call a poison center or 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.
	Diff-Quik Solution I	Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Diff-Quik Solution II	Wash out mouth with water. 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. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: Diff Quik Fixative Solution	No known significant effects or critical hazards.
	Diff-Quik Solution I	No known significant effects or critical hazards.
	Diff-Quik Solution II	No known significant effects or critical hazards.

Section 4. First aid measures

Inhalation	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Toxic if inhaled. No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	No specific data. No specific data. No specific data.
Inhalation	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	No specific data. No specific data. No specific data.
Skin contact	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	No specific data. No specific data. No specific data.
Ingestion	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	No specific data. No specific data. No specific data.

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

Notes to physician	: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
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

Extinguishing media

Suitable extinguishing media	: In case of fire, use water spray (fog), foam or dry chemical.
Unsuitable extinguishing media	: Do not use water jet.

Specific hazards arising from the chemical : Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Section 5. Fire-fighting measures

- 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. 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** : 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

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. 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** : 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".
- 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).

Methods and materials for containment and cleaning up

- Small spill** : 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.
- Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. 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. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. 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.

Section 8. Exposure controls/personal protection

C: 0.11 ppm, (as Hydrazoic acid vapor) Form: as Hydrazoic acid vapor
ACGIH TLV (United States, 3/2015).
 C: 0.29 mg/m³, (as Sodium azide) Form: as Sodium azide
NIOSH REL (United States, 10/2013).
Absorbed through skin. Notes: NAN3
 CEIL: 0.3 mg/m³, (NAN3)
NIOSH REL (United States, 10/2013).
Absorbed through skin. Notes: as HN3
 CEIL: 0.1 ppm, (as HN3)
OSHA PEL 1989 (United States, 3/1989).
Absorbed through skin. Notes: as HN3
 CEIL: 0.1 ppm, (as HN3)
OSHA PEL 1989 (United States, 3/1989).
Absorbed through skin. Notes: as NaN3
 CEIL: 0.3 mg/m³, (as NaN3)

- 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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- 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: safety glasses with side-shields.
- 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
- 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

Physical state	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Liquid. Liquid. Liquid.
Color	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Colorless. Red. Blue.
Odor	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Alcohol-like. Odorless. Odorless.
pH	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Not available. Not available. Not available.
Flash point	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Closed cup: 12°C (53.6°F) Not available. Not available.
Flammability (solid, gas)	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
Relative density	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	0.792 Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
Solubility in water	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
Partition coefficient: n-octanol/water	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	-0.74 Not available. Not available.
Auto-ignition temperature	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	464°C (867.2°F) Not available. Not available.
Viscosity	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Not available. Not available. Not available.
Aerosol product		
Type of aerosol	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	Not applicable. Not applicable. Not applicable.

Section 10. Stability and reactivity

Reactivity	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: Diff Quik Fixative Solution Diff-Quik Solution I Diff-Quik Solution II	The product is stable. The product is stable. The product is stable.

Section 10. Stability and reactivity

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	
Diff Quik Fixative Solution methanol	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours	
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours	
	LD50 Dermal	Rabbit	15800 mg/kg	-	
	LD50 Oral	Rat	5600 mg/kg	-	
	Diff Quik Fixative Solution	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
		LC50 Inhalation Vapor	Rat	64000 ppm	4 hours
		LD50 Dermal	Rabbit	15800 mg/kg	-
		LD50 Dermal	Rabbit	15800 mg/kg	-
		LD50 Oral	Mouse	7300 mg/kg	-
		LD50 Oral	Rabbit	14200 mg/kg	-
		LD50 Oral	Rat	5600 mg/kg	-
		LD50 Oral	Rat	5628 mg/kg	-
		LDLo Dermal	Monkey	393 mg/kg	-
		LDLo Oral	Human/30 min	143 mg/kg	-
LDLo Oral	Human/30 min	428 mg/kg	-		
LDLo Oral	Male	6422 mg/kg	-		
Diff-Quik Solution I sodium azide	LD50 Dermal	Rabbit	20 mg/kg	-	
	LD50 Dermal	Rat	50 mg/kg	-	
	LD50 Oral	Rat	27 mg/kg	-	

Conclusion/Summary : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Diff Quik Fixative Solution methanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

Conclusion/Summary

Skin : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Eyes : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Section 11. Toxicological information

Respiratory : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Sensitization

Not available.

Conclusion/Summary

Skin : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Respiratory : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Mutagenicity

Not available.

Conclusion/Summary : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Carcinogenicity

Not available.

Conclusion/Summary : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
Diff Quik Fixative Solution methanol	None.	-	-

Reproductive toxicity

Not available.

Conclusion/Summary : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Teratogenicity

Not available.

Conclusion/Summary : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Diff Quik Fixative Solution methanol	Category 1	Not determined	Not determined

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Potential acute health effects

Section 11. Toxicological information

Eye contact	: Diff Quik Fixative Solution	No known significant effects or critical hazards.
	Diff-Quik Solution I	No known significant effects or critical hazards.
	Diff-Quik Solution II	No known significant effects or critical hazards.
Inhalation	: Diff Quik Fixative Solution	Toxic if inhaled.
	Diff-Quik Solution I	No known significant effects or critical hazards.
	Diff-Quik Solution II	No known significant effects or critical hazards.
Skin contact	: Diff Quik Fixative Solution	No known significant effects or critical hazards.
	Diff-Quik Solution I	No known significant effects or critical hazards.
	Diff-Quik Solution II	No known significant effects or critical hazards.
Ingestion	: Diff Quik Fixative Solution	No known significant effects or critical hazards.
	Diff-Quik Solution I	No known significant effects or critical hazards.
	Diff-Quik Solution II	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: Diff Quik Fixative Solution	No specific data.
	Diff-Quik Solution I	No specific data.
	Diff-Quik Solution II	No specific data.
Inhalation	: Diff Quik Fixative Solution	No specific data.
	Diff-Quik Solution I	No specific data.
	Diff-Quik Solution II	No specific data.
Skin contact	: Diff Quik Fixative Solution	No specific data.
	Diff-Quik Solution I	No specific data.
	Diff-Quik Solution II	No specific data.
Ingestion	: Diff Quik Fixative Solution	No specific data.
	Diff-Quik Solution I	No specific data.
	Diff-Quik Solution II	No specific data.

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

Short term exposure

Potential immediate effects	: Diff Quik Fixative Solution	Not available.
	Diff-Quik Solution I	Not available.
	Diff-Quik Solution II	Not available.
Potential delayed effects	: Diff Quik Fixative Solution	Not available.
	Diff-Quik Solution I	Not available.
	Diff-Quik Solution II	Not available.

Long term exposure

Potential immediate effects	: Diff Quik Fixative Solution	Not available.
	Diff-Quik Solution I	Not available.
	Diff-Quik Solution II	Not available.
Potential delayed effects	: Diff Quik Fixative Solution	Not available.
	Diff-Quik Solution I	Not available.
	Diff-Quik Solution II	Not available.

Potential chronic health effects

Not available.

Conclusion/Summary	: Not available.	Diff Quik Fixative Solution
	Not available.	Diff-Quik Solution I
	Not available.	Diff-Quik Solution II

Section 11. Toxicological information

General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
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

Route	ATE value
Diff Quik Fixative Solution Inhalation (vapors)	5.941 mg/l

Interactive effects	: Diff Quik Fixative Solution	Not available.
	Diff-Quik Solution I	Not available.
	Diff-Quik Solution II	Not available.

Other information	: Diff Quik Fixative Solution	Not available.
	Diff-Quik Solution I	Not available.
	Diff-Quik Solution II	Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Diff Quik Fixative Solution methanol	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
Diff Quik Fixative Solution	Acute LC50 3289 to 4395 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute EC50 >10000 mg/l	Daphnia	48 hours
	Acute EC50 13200 mg/l	Fish	48 hours
	Acute EC50 16000 mg/l	Fish	48 hours
	Acute EC50 12700000 µg/l Fresh water	Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 >100 mg/l	Daphnia	96 hours
	Acute LC50 3289 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
Diff-Quik Solution I sodium azide	Acute LC50 >100 mg/l	Fish	96 hours
	Acute LC50 15400 mg/l	Fish	96 hours
Diff-Quik Solution I sodium azide	Acute EC50 0.348 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 4.2 to 6.2 mg/l Fresh water	Daphnia - Daphnia pulex - Larvae	48 hours
	Acute LC50 9000 µg/l Fresh water	Crustaceans - Gammarus lacustris	48 hours
	Acute LC50 0.68 mg/l Fresh water Chronic NOEC 5600 µg/l Marine water	Fish - Lepomis macrochirus Algae - Macrocyctis pyrifera	96 hours 96 hours

Conclusion/Summary	: Diff Quik Fixative Solution	Not available.
	Diff-Quik Solution I	Not available.
	Diff-Quik Solution II	Not available.

Section 12. Ecological information

Persistence and degradability

Conclusion/Summary : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Diff Quik Fixative Solution			
Diff Quik Fixative Solution	-	-	Readily
methanol	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Diff Quik Fixative Solution			
Diff Quik Fixative Solution	-0.74	-	low
methanol	-0.77	<10	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

Mobility : Diff Quik Fixative Solution Not available.
Diff-Quik Solution I Not available.
Diff-Quik Solution II Not available.

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

Section 13. Disposal considerations

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Diff Quik Fixative Solution Methanol (I); Methyl alcohol (I)	67-56-1	Listed	U154

Section 14. Transport information

DOT Classification

UN number Diff Quik Fixative Solution 1230
Diff-Quik Solution I Not regulated.
Diff-Quik Solution II Not regulated.

Section 14. Transport information

UN proper shipping name	Diff Quik Fixative Solution	Methanol
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-
Transport hazard class(es)	Diff Quik Fixative Solution	3 (6.1)
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-



Packing group	Diff Quik Fixative Solution	II
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Environmental hazards	Diff Quik Fixative Solution	No.
	Diff-Quik Solution I	No.
	Diff-Quik Solution II	No.

Additional information	Diff Quik Fixative Solution	-
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

TDG Classification

UN number	Diff Quik Fixative Solution	1230
	Diff-Quik Solution I	Not regulated.
	Diff-Quik Solution II	Not regulated.

UN proper shipping name	Diff Quik Fixative Solution	Methanol
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Transport hazard class(es)	Diff Quik Fixative Solution	3 (6.1)
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-



Packing group	Diff Quik Fixative Solution	II
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Environmental hazards	Diff Quik Fixative Solution	No.
	Diff-Quik Solution I	No.
	Diff-Quik Solution II	No.

Additional information	Diff Quik Fixative Solution	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.26-2.36 (Class 6).
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

ADR/RID

UN number	Diff Quik Fixative Solution	1230
	Diff-Quik Solution I	Not regulated.
	Diff-Quik Solution II	Not regulated.

UN proper shipping name	Diff Quik Fixative Solution	Methanol
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Section 14. Transport information

Transport hazard class(es)	Diff Quik Fixative Solution	3 (6.1)
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-



Packing group	Diff Quik Fixative Solution	II
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Environmental hazards	Diff Quik Fixative Solution	No.
	Diff-Quik Solution I	No.
	Diff-Quik Solution II	No.

Additional information	Diff Quik Fixative Solution	-
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

IMDG

UN number	Diff Quik Fixative Solution	1230
	Diff-Quik Solution I	Not regulated.
	Diff-Quik Solution II	Not regulated.

UN proper shipping name	Diff Quik Fixative Solution	Methanol
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Transport hazard class(es)	Diff Quik Fixative Solution	3 (6.1)
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-



Packing group	Diff Quik Fixative Solution	II
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Environmental hazards	Diff Quik Fixative Solution	No.
	Diff-Quik Solution I	No.
	Diff-Quik Solution II	No.

Additional information	Diff Quik Fixative Solution	-
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

IATA

UN number	Diff Quik Fixative Solution	1230
	Diff-Quik Solution I	Not regulated.
	Diff-Quik Solution II	Not regulated.

UN proper shipping name	Diff Quik Fixative Solution	Methanol
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Transport hazard class(es)	Diff Quik Fixative Solution	3 (6.1)
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-



Section 14. Transport information

Packing group	Diff Quik Fixative Solution	II
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-
Environmental hazards	Diff Quik Fixative Solution	No.
	Diff-Quik Solution I	No.
	Diff-Quik Solution II	No.
Additional information	Diff Quik Fixative Solution	-
	Diff-Quik Solution I	-
	Diff-Quik Solution II	-

Special precautions for user : Diff Quik Fixative Solution

Diff-Quik Solution I

Diff-Quik Solution II

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 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 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 Annex II of MARPOL and the IBC Code

Proper shipping name :

Ship type :

Pollution category :

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 311: disodium hydrogenorthophosphate

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : 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

Section 15. Regulatory information

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
Diff-Quik Solution I sodium azide	0.095	Yes.	500	-	1000	-

SARA 304 RQ : 1052631578.9 lbs / 477894736.8 kg

SARA 311/312

Classification : Fire hazard
Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Diff Quik Fixative Solution methanol	>50	Yes.	No.	No.	Yes.	No.
Diff-Quik Solution I sodium azide	0.095	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Diff Quik Fixative Solution Diff Quik Fixative Solution	-	100
Supplier notification	Diff Quik Fixative Solution Diff Quik Fixative Solution	-	100

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: Diff Quik Fixative Solution

New York : The following components are listed: Methanol

New Jersey : The following components are listed: Diff Quik Fixative Solution

Pennsylvania : The following components are listed: Diff Quik Fixative Solution

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Diff Quik Fixative Solution Methanol	No.	Yes.	No.	23000 µg/day (ingestion) 47000 µg/day (inhalation)

International regulations

Chemical Weapons Convention List Schedule I Chemicals : Diff Quik Fixative Solution Not listed

Diff-Quik Solution I Not listed

Diff-Quik Solution II Not listed

Chemical Weapons Convention List Schedule II Chemicals : Diff Quik Fixative Solution Not listed

Diff-Quik Solution I Not listed

Diff-Quik Solution II Not listed

Section 15. Regulatory information

Chemical Weapons	: Diff Quik Fixative Solution	Not listed
Convention List Schedule	Diff-Quik Solution I	Not listed
III Chemicals	Diff-Quik Solution II	Not listed

Section 16. Other information

History

Date of issue/Date of revision : 5/12/2017

Version : 1.05

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)
UN = United Nations

✔ Indicates information that has changed from previously issued version.

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Allergen :