

SAFETY DATA SHEET



~~2X Hi-RPM Hybridization Buffer, 25 ml. Agilent Part Number 5190-0403~~

1. Identification of the substance/preparation and company/undertaking

Identification of the substance or preparation

Product name : 2X Hi-RPM Hybridization Buffer, 25 ml. Agilent Part Number 5190-0403
Part No. : 5190-0403

Company/undertaking identification

Manufacturer / Supplier : Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany

Emergency telephone number : Contact your local Poison Center

2. Composition/information on ingredients

Substance/preparation : Preparation

Ingredient name	CAS number	%	EC number	Classification
polyethylene glycol octaphenol ether	9002-93-1	0 - 100		Xn; R22
sulfuric acid, monododecyl ester, lithium salt	2044-56-6	0 - 100	218-058-2	Not classified.
ethylenediamine tetraacetic acid	60-00-4	0 - 100	200-449-4	Not classified.
lithium chloride	7447-41-8	0 - 100	231-212-3	Xn; R22
4-morpholineethanesulfonic acid	4432-31-9	0 - 100	224-632-3	Not classified.
oxirane, methyl-, polymer with oxirane, mono[3-[1,3,3,3-tetramethyl-1-(trimethylsilyl)oxy]disiloxanyl]propyl] ether	134180-76-0	0 - 60		Not classified.
Water	7732-18-5	0 - 50	231-791-2	Not classified.
See section 16 for the full text of the R-phrases declared above				

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

Use of the substance/preparation : 25 ml.

Synonyms : alfenol 3; alfenol 9; antarox a-200; conco nix-100; 3,6,9,12,15,18,21,24,27,30-decaoxatriacontan-1-ol, 30-(p-(1,1,3,3-tetramethylbutyl)phenyl)-; hydrol sw; hyonic pe-250; igepal ca-630; marlophen 820; neutronyx 605; octoxinol; octoxynol; octoxynol 3; octoxynol 9; octyl phenol condensed with 12-13 moles ethylene oxide; p-tert-octylphenoxy polyethoxyethanol; ope 30; peg-9 octyl phenyl ether; polyethylene glycol monoether with p-tert-octylphenyl; polyethylene glycol mono(4-octylphenyl) ether; polyethylene glycol mono(4-tert-octylphenyl) ether; polyethylene glycol mono(p-tert-octylphenyl) ether; polyethylene glycol mono(p-(1,1,3,3-tetramethylbutyl)phenyl) ether; polyethylene glycol octylphenol ether; polyethylene glycol 450 octyl phenyl ether; polyethylene glycol p-octylphenyl ether; polyethylene glycol p-tert-octylphenyl ether; polyethylene glycol p-1,1,3,3-tetramethylbutylphenyl ether; poly(oxy-1,2-ethanediyl), alpha-(4-(1,1,3,3-tetramethylbutyl)phenyl)-omega-hydroxy- (9ci); polyoxyethylene mono(octylphenyl) ether; polyoxyethylene (9) octylphenyl ether; polyoxyethylene (13) octylphenyl ether; poly(oxyethylene)p-tert-octylphenyl ether; preceptin; triton x; triton x 35; triton x 45; triton x 100; triton x 102; triton x 165; triton x 305; triton x 405; triton x 705; tx 100; sulfuric acid, monododecyl ester, lithium salt; acide ethylenediaminetetraacetique (french); celon a; cheelox; chemcolox 340; celon ath; complexon ii; 3,6-diazaoctanedioic acid, 3,6-bis(carboxymethyl)-; edathamil; edetic; edetic acid; edta; edta (chelating agent); edta acid; endrate; ethylenediaminetetraacetate; ethylenediaminetetraacetic acid; ethylenediamine-n,n,n',n'-tetraacetic acid; ethylenedinitrilotetraacetic acid; glycine, n,n'-1,2-ethanediylbis(n-(carboxymethyl)- (9ci); havidote; metaquest a; nervanaid b acid; nullapon b acid; nullapon bf acid; perma kleer 50 acid; sequestrine aa; sequestric acid; sequestrol; tetrine acid; titriplex; tricon bw; trilon b; trilon bw; versene; versene acid; warkeelate acid; acetic acid, (ethylenedinitrilo)tetra-; (ethylenedinitrilo)tetraacetic acid; glycine, n,n'-1,2-ethanediylbis(n-(carboxymethyl)-; hampene; ethylenediamine tetraacetic acid (edta) ; chlorure de lithium (french); 4-morpholineethanesulfonic acid.

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2. Composition/information on ingredients

3. Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xn; R22
Human health hazards : Harmful if swallowed.

See section 11 for more detailed information on health effects and symptoms.

4. First-aid measures

First-aid measures

- Inhalation** : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention if adverse health effects persist or are severe.
- Ingestion** : Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if adverse health effects persist or are severe.
- Skin contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if adverse health effects persist or are severe.
- Eye contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if adverse health effects persist or are severe.

See section 11 for more detailed information on health effects and symptoms.

5. Fire-fighting measures

Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Special exposure hazards - Explosibility** : No specific hazard.
- 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.

6. Accidental release measures

- Personal precautions** : Avoid contact with eyes, skin and clothing.
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilt material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dyke spilt material or otherwise contain it to ensure runoff does not reach a waterway. Place spilt material in an appropriate container for disposal.

7. Handling and storage

- Handling** : Do not ingest. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended** : Use original container.

8. Exposure controls/personal protection

- Exposure limit values** : Not available.
- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

8. Exposure controls/personal protection

Exposure controls

- Occupational exposure controls** : No special ventilation requirements. Good general ventilation should be sufficient to control airborne levels. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- 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.
- Eye 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 or dusts.
- Skin 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.
- 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.
- 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.

9. Physical and chemical properties

General information

Appearance

Physical state : Liquid.

Important health, safety and environmental information

- Boiling point** : The lowest known value is 100°C (212°F) (Water).
- Melting point** : May start to solidify at 0°C (32°F) based on data for: Water.
- Flash point** : Not applicable.
- Relative density** : The only known value is 0.86 (Water = 1) (ethylenediamine tetraacetic acid).
- Solubility** : Soluble in cold water.

10. Stability and reactivity

- Stability** : The product is stable.
- Hazardous decomposition products** : These products are halogenated compounds, hydrogen chloride.

11. Toxicological information

Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : Harmful if swallowed.
- Skin contact** : No known significant effects or critical hazards.
- Eye contact** : No known significant effects or critical hazards.

Acute toxicity

<u>Product/ingredient name</u>	<u>Test</u>	<u>Result</u>	<u>Route</u>	<u>Species</u>
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11. Toxicological information

polyethylene glycol octaphenol ether	LD50	1800 mg/kg	Oral	Rat
	LD50	1900 mg/kg	Oral	Rat
	LD50	3800 mg/kg	Oral	Rat
lithium chloride	LD50	526 mg/kg	Oral	Rat
	LD50	800 mg/kg	Oral	Rabbit
	LD50	422 mg/kg	Oral	wild bird species

Potential chronic health effects

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : No known significant effects or critical hazards.

Target organs : Contains material which causes damage to the following organs: skin, central nervous system (CNS).

12. Ecological information

Ecotoxicity data

<u>Product/ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
polyethylene glycol octaphenol ether	Pimephales promelas (LC50)	96 hour/hours	4.5 mg/l
	Pimephales promelas (LC50)	96 hour/hours	5.38 mg/l
	Pimephales promelas (LC50)	96 hour/hours	6 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	>10 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	12 mg/l
	Lepomis macrochirus (LC50)	96 hour/hours	531 mg/l

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

13. Disposal considerations

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. 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.

Hazardous waste : The classification of the product may meet the criteria for a hazardous waste.

14. Transport information

International transport regulations

<u>Regulatory information</u>	<u>UN number</u>	<u>Proper shipping name</u>	<u>Class</u>	<u>PG*</u>	<u>Label</u>	<u>Additional information</u>
ADR/RID Class	Not regulated.	-	-	-	-	-
ADNR Class	Not regulated.	-	-	-	-	-
IMDG Class	Not regulated.	-	-	-	-	-
IATA Class	Not regulated.	-	-	-	-	-

PG* : Packing group

15. Regulatory information

EU regulations

Hazard symbol/symbols	: Harmful
Risk phrases	: R22- Harmful if swallowed.
Contains	: polyethylene glycol octaphenol ether lithium chloride 231-212-3
Product use	: Classification and labelling have been performed according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and the intended use. - Industrial applications.

16. Other information

Full text of R-phrases referred to in sections 2 and 3 - Europe : R22- Harmful if swallowed.

Full text of classifications referred to in sections 2 and 3 - Europe : Xn - Harmful

History

Date of printing	: 9/26/2006.
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Date of previous issue	: No previous validation.
Version	: 0.01

Notice to reader

DISCLAIMER: *This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing the suitability of the Product for a particular application.*

 Indicates information that has changed from previously issued version.