Life Science Gloves Product Information

Product Family: HALYARD* PUREZERO* MARIN* Nitrile Exam Gloves
Produce Codes: 48766 (XS), 48767 (S), 48768 (M), 48769 (L), and 48770 (XL)
Alt Codes: LFS111XS, LFS111SM, LFS111MD, LFS111LG, LFS111XL

ISO 374-1/TYPE B KTJ EN ISO 374-1:2016+A1:2018	Permeation Test		Degradation Test
	EN 16523-1:2015+A1:2018		EN ISO 374-4:2019
	minimum breakthrough time (min)	Performance Level	Degradation (%)
Sodium Hydroxide, 40% (K)	>480	6	-39.6
Formaldehyde, 37% (T)	>480	6	32.4
n-Heptane, 99% (J)	>38.9	2	65.6

ISO 21420:2020 Dexterity Classification = 5

Protection against micro-organisms risks to EN ISO 374-5:2016

Bacteria and fungi (Test method EN ISO 374-2:2019)	PASS
Viruses (Test Method ISO 16604:2004)	PASS

Tested for Use with Chemotherapy Drugs: Per ASTM D6978
Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs

Indications of Use
The PUREZERO* MARIN* Nitrile Exam Glove with Chemotherapy Drugs, Fentanyl Citrate and Gastric Acid claim is a disposable device intended for medical purposes that is worn on the examiner's hand to prevent contamination between patient and examiner.

The following chemotherapy drugs and concentration had NO breakthrough detected up to 240 minutes:

Cisplatin (1 mg/ml)	Mitomycin (0.5 mg/ml)
Cyclophosphamide (20 mg/ml)	Mitoxantrone HCl (2 mg/ml)
Dacarbazine (10 mg/ml)	Paclitaxel (6 mg/ml)
Doxorubicin HCl (2 mg/ml)	Vincrinstine Sulfate (1 mg/ml)
Etoposide (20 ml/ml)	Fentanyl Citrate Injection (100 mcg/2 ml)
Fluorouracil (50 mg/ml)	Simulated Gastric Acid Fluid/Fentanyl
Ifosfamide (50 mg/ml)	Citrate Injection Mix 50/50 Solution
Methotrexate (25 mg/ml)	

The following chemotherapy drugs and concentration showed breakthrough detected in less than 90 minutes:

Carmustine (3.3 mg/ml)	55.2 minutes
Thiotepa (10 mg/ml)	88.6 minutes

Warning: Not for use with Carmustine or Thiotepa

Product Family: HALYARD* PUREZERO* MARIN-XTRA* Nitrile Exam Gloves
Produce Codes: 48761 (XS), 48762 (S), 48763 (M), 48764 (L), and 48765 (XL)
Alt Product Codes: LFS121XS, LFS121SM, LFS121MD, LFS121LG, LFS121XL

ISO 374-1/TYPE B KTJ EN ISO 374-1:2016+A1:2018	Permeation Test		Degradation Test
	EN 16523-1:2015+A1:2018		EN ISO 374-4:2019
	minimum breakthrough time (min)	Performance Level	Degradation (%)
Sodium Hydroxide, 40% (K)	>480	6	-39.6
Formaldehyde, 37% (T)	>480	6	32.4
n-Heptane, 99% (J)	>38.9	2	65.6

ISO 21420:2020 Dexterity Classification = 5

ISO 374-5:2016 VIRUS

Protection against micro-organisms risks to EN ISO 374-5:2016

Bacteria and fungi (Test method EN ISO 374-2:2019)	PASS
Viruses (Test Method ISO 16604:2004)	PASS

Tested for Use with Chemotherapy Drugs: Per ASTM D6978
Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs

Indications of Use
The PUREZERO* MARIN-XTRA* Nitrile Exam Glove with Chemotherapy Drugs, Fentanyt Citrate and Gastric Acid claim is a disposable device intended for medical purposes that is worn on the examiner's hand to prevent contamination between patient and examiner.

The following chemotherapy drugs and concentration had NO breakthrough detected up to 240 minutes:

Cisplatin (1 mg/ml)	Mitomycin (0.5 mg/ml)
Cyclophosphamide (20 mg/ml)	Mitoxantrone HCl (2 mg/ml)
Dacarbazine (10 mg/ml)	Paclitaxel (6 mg/ml)
Doxorubicin HCl (2 mg/ml)	Vincrinstine Sulfate (1 mg/ml)
Etoposide (20 ml/ml)	Fentanyl Citrate Injection (100 mcg/2 ml)
Fluorouracil (50 mg/ml)	Simulated Gastric Acid Fluid/Fentanyl
Ifosfamide (50 mg/ml)	Citrate Injection Mix 50/50 Solution
Methotrexate (25 mg/ml)	

The following chemotherapy drugs and concentration showed breakthrough detected in less than 90 minutes:

Carmustine (3.3 mg/ml)	55.2 minutes
Thiotepa (10 mg/ml)	88.6 minutes

Warning: Not for use with Carmustine or Thiotepa

Product Family: HALYARD* PUREZERO* LIMON* Nitrile Exam Gloves
Produce Codes: 48750 (XS), 48751 (S), 48752 (M), 48753 (L), and 48754 (XL)
Alt Product Codes: LFS311XS, LFS311SM, LFS311MD, LFS311LG, LFS311XL

ISO 374-1:2016/Type C K-Low Chemical EN ISO 374-1:2016+A1:2018	Permeation Test		Degradation Test
	EN 16523-1:2015+A1:2018		EN ISO 374-4:2019
	minimum breakthrough time (min)	Performance Level	Degradation (%)
Sodium Hydroxide, 40% (K)	>480	6	-16.55

ISO 21420:2020 Dexterity Classification = 5

Protection against micro-organisms risks to EN ISO 374-5:2016

Bacteria and fungi (Test method EN ISO 374-2:2019)	PASS
Viruses (Test Method ISO 16604:2004)	PASS

Tested for Use with Chemotherapy Drugs: Per ASTM D6978
Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs

Indications of Use
The PUREZERO* LIMON* Nitrile Exam Glove with Chemotherapy Drugs, Fentanyt Citrate and Gastric Acid claim is a disposable device intended for medical purposes that is worn on the examiner's hand to prevent contamination between patient and examiner.

The following chemotherapy drugs and concentration had NO breakthrough detected up to 240 minutes:

Cisplatin (1 mg/ml)	Mitomycin (0.5 mg/ml)
Cyclophosphamide (20 mg/ml)	Mitoxantrone HCl (2 mg/ml)
Dacarbazine (10 mg/ml)	Paclitaxel (6 mg/ml)
Doxorubicin HCl (2 mg/ml)	Vincrinstine Sulfate (1 mg/ml)
Etoposide (20 ml/ml)	Fentanyl Citrate Injection (100 mcg/2 ml)
Fluorouracil (50 mg/ml)	Simulated Gastric Acid Fluid/Fentanyl
Ifosfamide (50 mg/ml)	Citrate Injection Mix 50/50 Solution
Methotrexate (25 mg/ml)	

The following chemotherapy drugs and concentration showed breakthrough detected in less than 90 minutes:

Carmustine (3.3 mg/ml)	34.3 minutes
Thiotepa (10 mg/ml)	87.6 minutes

Warning: Not for use with Carmustine or Thiotepa

Product Family: HALYARD* PUREZERO* LIMON-XTRA* Nitrile Exam Gloves
Produce Codes: 48797 (XS), 48798 (S), 48799 (M), 48800 (L), and 48801 (XL)
Alt Product Codes: LFS321XS, LFS321SM, LFS321MD, LFS321LG, LFS321XL

ISO 374-1/TYPE B KTJ EN ISO 374-1:2016+A1:2018	Permeation Test		Degradation Test
	EN 16523-1:2015+A1:2018		EN ISO 374-4:2019
	minimum breakthrough time (min)	Performance Level	Degradation (%)
Sodium Hydroxide, 40% (K)	>480	6	-16.55
Formaldehyde, 37% (T)	>480	6	-14.1
n-Heptane, 99% (J)	>34.7	2	69.3

ISO 21420:2020 Dexterity Classification = 5

Protection against micro-organisms risks to EN ISO 374-5:2016

Bacteria and fungi (Test method EN ISO 374-2:2019) PASS
Viruses (Test Method ISO 16604:2004) PASS

Tested for Use with Chemotherapy Drugs: Per ASTM D6978
Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs

Indications of Use
The PUREZERO* LIMON-XTRA* Nitrile Exam Glove with Chemotherapy Drugs, Fentanyt Citrate and Gastric Acid claim is a disposable device intended for medical purposes that is worn on the examiner's hand to prevent contamination between patient and examiner.

The following chemotherapy drugs and concentration had NO breakthrough detected up to 240 minutes:

Cisplatin (1 mg/ml)	Mitomycin (0.5 mg/ml)
Cyclophosphamide (20 mg/ml)	Mitoxantrone HCl (2 mg/ml)
Dacarbazine (10 mg/ml)	Paclitaxel (6 mg/ml)
Doxorubicin HCl (2 mg/ml)	Vincrinstine Sulfate (1 mg/ml)
Etoposide (20 ml/ml)	Fentanyl Citrate Injection (100 mcg/2 ml)
Fluorouracil (50 mg/ml)	Simulated Gastric Acid Fluid/Fentanyl
Ifosfamide (50 mg/ml)	Citrate Injection Mix 50/50 Solution
Methotrexate (25 mg/ml)	

The following chemotherapy drugs and concentration showed breakthrough detected in less than 90 minutes:

Carmustine (3.3 mg/ml)	34.3 minutes
Thiotepa (10 mg/ml)	87.6 minutes

Warning: Not for use with Carmustine or Thiotepa

Product Family: HALYARD* PUREZERO*ULTRA VIOLET* Nitrile Exam Gloves
Product Codes: 48771 (XS), 48772 (S), 48773 (M), 48774 (L), and 48775 (XL)
Alt Product Codes: LFS511XS, LFS511SM, LFS511MD, LFS511LG, LFS511XL

ISO 374-1/TYPE B KTJ EN ISO 374-1:2016+A1:2018	Permeation Test EN 16523-1:2015+A1:2018		Degradation Test EN ISO 374-4:2019
	minimum breakthrough time (min)	Performance Level	Degradation (%)
Sodium Hydroxide, 40% (K)	>480	6	-2.15
Formaldehyde, 37% (T)	>480	6	-24.9
n-Heptane, 99% (J)	>33.9	2	59.0

ISO 21420:2020 Dexterity Classification = 5

ISO 374-5:2016 VIRUS

Protection against micro-organisms risks to EN ISO 374-5:2016

Bacteria and fungi (Test method EN ISO 374-2:2019)	PASS
Viruses (Test Method ISO 16604:2004)	PASS

Tested for Use with Chemotherapy Drugs: Per ASTM D6978
Standard Practice for Assessment of Resistance of Medical Gloves to Permeation by Chemotherapy Drugs

Indications of Use
The PUREZERO* ULTRA VIOLET* Nitrile Exam Glove with Chemotherapy Drugs, Fentanyt Citrate and Gastric Acid claim is a disposable device intended for medical purposes that is worn on the examiner's hand to prevent contamination between patient and examiner.

The following chemotherapy drugs and concentration had NO breakthrough detected up to 240 minutes:

Cisplatin (1 mg/ml)	Mitomycin C (0.5 mg/ml)
Cyclophosphamide (20 mg/ml)	Mitoxantrone HCl (2 mg/ml)
Dacarbazine (10 mg/ml)	Paclitaxel (6 mg/ml)
Doxorubicin HCl (2 mg/ml)	Vincrinstine Sulfate (1 mg/ml)
Etoposide (20 ml/ml)	Fentanyl Citrate Injection (100 mcg/2 ml)
Fluorouracil (50 mg/ml)	
Ifosfamide (50 mg/ml)	
Methotrexate (25 mg/ml)	

The following chemotherapy drugs and concentration showed breakthrough detected in less than 90 minutes:

Carmustine (3.3 mg/ml)	23.3 minutes
Thiotepa (10 mg/ml)	58.2 minutes

Warning: Not for use with Carmustine or Thiotepa

Instructions of Use:
To don glove, insert hand into cuff and pull up with even pressure over hand and wrist. Adjust as needed for comfort and dexterity. To remove, grasp the outside of the glove near the wrist; pull and peel the now inverted glove away from the hand. When donned properly, no interfare issues should exist. Keep gloves in the original packaging for transportation.

CAUTION: The testing conditions used are intended to approximate the worst case conditions for clinical use. Testing was conducted on single layer glove material. It is the users'responsibility to determine the applicability of these gloves for their intended use with chemotherapy drugs.

Storage Recommendations: Store in a cool, dry place. Open box should be shielded from exposure to direct sunlight intense artificial light,x-ray machines and other sources of ozone.This information does not reflect the actual duration of protection in the wo1kplace and the differentiation between mixtures and pure chemical.
The chemical resistance has been assessed under laboratory conditions from samples taken from the palm only (except in cases where the glove is equal to or over400 mm· where the cuff is tested also) and relates only to the chemical tested. It can be different if the chemical is used in a mixture.
It is recommended to check that the gloves are suitable for the intended use because the conditions at the workplace may differ from the type test depending on temperature, abrasion and degradation. When used, protective gloves may provide less resistance to the dangerous chemical due to changes in physical properties. Movements, snagging, rubbing, degradation caused by the chemical contact etc may reduce the actual use time significantly. For corrosive chemicals, degradation can be the most important factor to consider in selection of chemical resistant gloves.
Before usage, inspect the gloves for any defect or imperfection.
The penetration resistance has been assessed under laboratory conditions and relates only to the tested specimen.