



Trade name: ARIES® Extraction Kit

SECTION 1: Identification

Product identifier used on the label:

Product Name: ARIES® Extraction Kit

Other means of identification:

Commercial name(s): ARIES® Extraction Kit.

Product Codes: 50-10005, 50-10026

Recommended use of the chemical and restrictions on use:

Recommended use: For Professional use only. Use as per Product Insert.

Recommended restrictions: Uses other than as recommended above

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Company Name: Luminex Corporation.
Company Address: 12212 Technology Blvd
Austin, Texas 78727
Company Telephone: Tel: 1-512-381-4397
Fax: 1-512-219-5114
<http://www.luminexcorp.com>
Company Contact Email: support@luminexcorp.com

Emergency phone number: 1-(512) 381-4397 (24/7)

SECTION 2: Hazard(s) identification

UNITED STATES

Overall Classification for the kit:

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

Flammable Liquid, Category 2

Health hazards

Acute Toxicity, Oral, Category 4
Acute Toxicity, Dermal, Category 4
Skin Corrosion Category 1C
Serious Eye Damage, Category 1
Acute Toxicity, Inhalation, Category 4

Environmental hazards

ARIES® Extraction Kit

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: **DANGER**

GHS Hazard statement(s): Highly flammable liquid and vapor
Causes severe skin burns and eye damage
Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe dusts or mists.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- If swallowed: Call a poison center/doctor if you feel unwell.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a poison center/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Take off contaminated clothing and wash it before reuse.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

- Store in a well-ventilated place.

ARIES® Extraction Kit

- Store locked up.

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations.

Classification of the compartments of the kit:

Plug 1

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Not classified as hazardous

GHS Signal word: None required

GHS Hazard statement(s): None required

GHS Hazard symbol(s): None required

GHS Precautionary statement(s): None required

Plug 2

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

Flammable Liquid, Category 2

Health hazards

Serious Eye Irritation, Category 2A

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: **DANGER**

GHS Hazard statement(s): Highly flammable liquid and vapor
Causes serious eye irritation

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces.– No smoking.
- Keep container tightly closed.
- Ground/Bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.

ARIES® Extraction Kit

- Wash thoroughly after handling.
- Wear protective gloves//eye protection/face protection

Response:

- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

- Store in a well-ventilated place. Keep cool.

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Plug 3

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

Flammable Liquid, Category 2

Health hazards

Serious Eye Irritation, Category 2A

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word:

DANGER

GHS Hazard statement(s):

Highly flammable liquid and vapor
Causes serious eye irritation

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces.– No smoking.
- Keep container tightly closed.
- Ground/Bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.

ARIES® Extraction Kit

- Take precautionary measures against static discharge.
- Wash thoroughly after handling.
- Wear protective gloves//eye protection/face protection

Response:

- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

- Store in a well-ventilated place. Keep cool.

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Plug 4

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

None known

Health hazards

Acute Toxicity, Oral, Category 4

Acute Toxicity, Dermal, Category 4

Skin Corrosion Category 1C

Serious Eye Damage, Category 1

Acute Toxicity, Inhalation, Category 4

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word:

DANGER

GHS Hazard statement(s):

Causes severe skin burns and eye damage

Harmful if swallowed

Harmful in contact with skin

Harmful if inhaled

GHS Hazard symbol(s):



ARIES® Extraction Kit

GHS Precautionary statement(s):

Prevention:

- Do not breathe dusts or mists.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- If swallowed: Call a poison center/doctor if you feel unwell.
- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a poison center/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Take off contaminated clothing and wash it before reuse.

Storage:

- Store locked up

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Wash 1

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Physical hazards

Flammable Liquid, Category 2

Health hazards

Skin Corrosion Category 1C

Serious Eye Damage, Category 1

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word:

DANGER

GHS Hazard statement(s):

Highly flammable liquid and vapor
Causes severe skin burns and eye damage

ARIES® Extraction Kit

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces.– No smoking.
- Keep container tightly closed.
- Ground/Bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Do not breathe dusts or mists.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.

Response:

- If swallowed: Rinse mouth. Do NOT induce vomiting.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a poison center/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Wash contaminated clothing before reuse.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

- Store in a well-ventilated place. Keep cool.
- Store locked up

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Wash 2

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

Not classified as hazardous

ARIES® Extraction Kit

GHS Signal word: None required
GHS Hazard statement(s): None required
GHS Hazard symbol(s): None required
GHS Precautionary statement(s): None required

Elution

Classification of the chemical in accordance with paragraph (d) of §1910.1200:
Not classified as hazardous

GHS Signal word: None required
GHS Hazard statement(s): None required
GHS Hazard symbol(s): None required
GHS Precautionary statement(s): None required

CANADA

Overall Classification for the kit:

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards

Flammable Liquid, Category 2

Health hazards

Acute Toxicity, Oral, Category 4

Acute Toxicity, Dermal, Category 4

Skin Corrosion Category 1C

Serious Eye Damage, Category 1

Acute Toxicity, Inhalation, Category 4

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: **DANGER**

GHS Hazard statement(s): Highly flammable liquid and vapour
Causes severe skin burns and eye damage
Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

GHS Hazard symbol(s):



ARIES® Extraction Kit

GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Use explosion-proof [electrical/ventilating/ lighting] equipment.
- Use non-sparking tools.
- Take action to prevent static discharges.
- Do not breathe dust/fume/gas/mist/ vapours/spray.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Take off contaminated clothing and wash it before reuse.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

- Store in a well-ventilated place.
- Store locked up

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Classification of the compartments of the kit:

Plug 1

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Not classified as hazardous

GHS Signal word:	None required
GHS Hazard statement(s):	None required
GHS Hazard symbol(s):	None required

ARIES® Extraction Kit

GHS Precautionary statement(s): None required

Plug 2

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards

Flammable Liquid, Category 2

Health hazards

Serious Eye Irritation, Category 2A

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: **DANGER**

GHS Hazard statement(s): Highly flammable liquid and vapour
Causes serious eye irritation

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Ground and bond container and receiving equipment.
- Use explosion-proof [electrical/ventilating/ lighting] equipment.
- Use non-sparking tools.
- Take action to prevent static discharges.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

- Store in a well-ventilated place. Keep cool.

Disposal:

ARIES® Extraction Kit

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Plug 3

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards

Flammable Liquid, Category 2

Health hazards

Serious Eye Irritation, Category 2A

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word: DANGER

GHS Hazard statement(s): Highly flammable liquid and vapour
Causes serious eye irritation

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Ground and bond container and receiving equipment.
- Use explosion-proof [electrical/ventilating/ lighting] equipment.
- Use non-sparking tools.
- Take action to prevent static discharges.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

ARIES® Extraction Kit

- Store in a well-ventilated place. Keep cool.

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Plug 4

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards

None known

Health hazards

Acute Toxicity, Oral, Category 4

Acute Toxicity, Dermal, Category 4

Skin Corrosion Category 1C

Serious Eye Damage, Category 1

Acute Toxicity, Inhalation, Category 4

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word:

DANGER

GHS Hazard statement(s):

Causes severe skin burns and eye damage
Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Do not breathe dust/fume/gas/mist/ vapours/spray.
- Wash thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

ARIES® Extraction Kit

- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Take off contaminated clothing and wash it before reuse.

Storage:

- Store locked up

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Wash 1

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Physical hazards

Flammable Liquid, Category 2

Health hazards

Skin Corrosion Category 1C

Serious Eye Damage, Category 1

Specific Target Organ Toxicity, Single Exposure, Category 3

Environmental hazards

Not adopted under OSHA paragraph (d) of §1910.1200

GHS Signal word:

DANGER

GHS Hazard statement(s):

Highly flammable liquid and vapour
Causes severe skin burns and eye damage

GHS Hazard symbol(s):



GHS Precautionary statement(s):

Prevention:

- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Ground and bond container and receiving equipment.

ARIES® Extraction Kit

- Use explosion-proof [electrical/ventilating/ lighting] equipment.
- Use non-sparking tools.
- Take action to prevent static discharges.
- Do not breathe dust/fume/gas/mist/ vapours/spray.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection

Response:

- IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- Immediately call a POISON CENTER/doctor.
- Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
- Wash contaminated clothing before reuse.
- In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Storage:

- Store in a well-ventilated place. Keep cool.
- Store locked up

Disposal:

- Dispose of contents/container to an approved disposal site in accordance with local/regional/national/ international regulations

Wash 2

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Not classified as hazardous

GHS Signal word: None required

GHS Hazard statement(s): None required

GHS Hazard symbol(s): None required

GHS Precautionary statement(s): None required

Elution

Classification of the chemical in accordance with Hazardous Products Regulations (WHMIS 2015):

Not classified as hazardous

ARIES[®] Extraction Kit

GHS Signal word: None required
GHS Hazard statement(s): None required
GHS Hazard symbol(s): None required
GHS Precautionary statement(s): None required

Hazard(s) not otherwise classified (HNOC):

None known.

Percentage of ingredient(s) of unknown acute toxicity:

Not applicable

SECTION 3: Composition/information on ingredients

PLUG 1:

Not classified as a hazardous mixture and therefore does not require reporting in this section.

PLUG 2:

Chemical name	CAS#	Concentration (weight %)
Isopropanol	67-63-0	> 95%

PLUG 3:

Chemical name	CAS#	Concentration (weight %)
Isopropanol	67-63-0	80-100%

PLUG 4:

Chemical name	CAS#	Concentration (weight %)
Guanidinium Thiocyanate	593-84-0	50-55%
Poly(oxy-1,2-ethanediyl), α -[4-(1,1,3,3-tetramethylbutyl)phenyl]- ω -hydroxy-	9002-93-1	3-5%

ARIES[®] Extraction Kit

WASH 1:

Chemical name	CAS#	Concentration (weight %)
Isopropanol	67-63-0	25-50%
Guanidinium Thiocyanate	593-84-0	5-10%

WASH 2:

Not classified as a hazardous mixture and therefore does not require reporting in this section.

ELUTION:

Not classified as a hazardous mixture and therefore does not require reporting in this section.

Note: The balance of the ingredients for each compartment are not classified as hazardous or are below the concentration limit to be classified as hazardous, under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910. 1200 and HPR WHMIS 2015.

SECTION 4: First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion:

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

Skin contact: Remove contaminated clothing. Wash with water and soap and rinse thoroughly. Seek medical advice if irritation or pain develops.

Eye contact: In case of eye contact, remove contact lenses and rinse immediately with plenty of water, including under the eyelids, for at least 15 mins. Get medical attention if symptoms develop.

Ingestion: Do NOT induce vomiting. Get medical attention immediately. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed:

Kit: Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

Plug 1: None known

Plug 2: Causes severe eye irritation.

Plug 3: Causes severe eye irritation.

Plug 4: Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

ARIES® Extraction Kit

Wash 1: Causes severe skin burns and eye damage.

Wash 2: None known

Elution: None known

Indication of immediate medical attention and special treatment needed:

If any symptoms are observed, contact a physician and give them this SDS sheet. Provide general supportive measures and treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

In case of fire: Use water spray (fog), carbon dioxide (CO₂), dry chemical powder or foam to extinguish.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Highly flammable. Easily ignited by heat, sparks or flames or other sources of ignition. Containers should be grounded and bonded. Vapors are initially heavier than air and spread along ground. Vapors may reach an ignition source, and flashback. Runoff to sewer may create fire or explosion hazard downstream from the source. Gases may form explosive mixtures with air.

Hazardous combustion products may include the following substances: Carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides.

Special protective equipment and precautions for fire-fighters:

Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Keep out of drains, sewers, ditches and waterways. Inhalation is a health risk. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Wear self-contained breathing apparatus and protective clothing. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training.

For large spillages, evacuate the area of all non-essential personnel. Keep all sources of ignition and hot metal surfaces away from spill/release if safe to do so. The use of explosion-proof electrical equipment is recommended. Avoid contact with skin, eyes and clothing.

Ventilate contaminated area thoroughly. Avoid contact with spilled or released material.

Immediately remove all contaminated clothing. Stay upwind and away from spill/release.

Wear appropriate protective equipment, such as gloves, goggles and protective clothing, as conditions warrant (see Section 8).

See Sections 2 and 7 for additional information on hazards and precautionary measures.

See Section 13 for disposal guidance.

ARIES® Extraction Kit

Methods and materials for containment and cleaning up:

Avoid disposal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Shut off leaks, if possible. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Absorb spill with inert material and place in suitable container for disposal.

SECTION 7: Handling and storage

Precautions for safe handling:

Keep away from heat, sparks and open flames. No smoking. Use only with adequate ventilation. Wear appropriate personal protective equipment and use exposure controls as indicated in Section 8. Avoid contact with skin and eyes. Avoid breathing product dust or vapors. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Non-sparking tools should be used. Ground and bond all transfer and storage equipment to prevent static sparks. Do not enter confined spaces without following proper entry procedures. Remove contaminated clothing immediately. Wash with soap and water after working with this product.

Conditions for safe storage, including any incompatibles:

Keep away from flame, sparks, excessive temperatures and open flames. Keep away from strong oxidizers, ignition sources and heat.

Storage temperature: Store at 15°C to 30°C upon receipt.

SECTION 8: Exposure controls/personal protection

Control Parameters

Ingredients with occupational exposure limits are listed below.

Ingredient	Occupational Exposure Limits
Isopropanol (Plug 2, Plug 3, Wash 1)	US – OSHA Final PELs - 400 ppm TWA; 980 mg/m ³ TWA US – ACGIH TLV-STEL - 400 ppm STEL US – ACGIH TLV-TWA - 200 ppm STEL U.S. – NIOSH IDLH - 2000 ppm IDLH (10% LEL) U.S. – NIOSH TWA - 400 ppm TWA; 980 mg/m ³ TWA U.S. – NIOSH STEL - 500 ppm STEL; 1225 mg/m ³ STEL Canada - Nunavut - 200 ppm TWA, 400 ppm STEL Canada - Northwest Territories - 200 ppm TWA, 400 ppm STEL Canada - Nova Scotia - 200 ppm TWA, 400 ppm STEL Canada - Newfoundland & Labrador - 200 ppm TWA, 400 ppm STEL Canada - Prince Edward Island - 200 ppm TWA, 400 ppm STEL Canada - Ontario - 200 ppm TWA, 400 ppm STEL Canada - British Columbia - 200 ppm TWA, 400 ppm STEL

ARIES® Extraction Kit

Ingredient	Occupational Exposure Limits
	Canada - Quebec - 400 ppm TWAEV; 985 mg/m ³ TWAEV, 500 ppm STEV; 1230 mg/m ³ STEV Canada - Alberta - 200 ppm TWA; 492 mg/m ³ TWA, 400 ppm STEL; 984 mg/m ³ STEL Canada - Manitoba - 200 ppm TWA, 400 ppm STEL Canada - New Brunswick - 400 ppm TWA; 983 mg/m ³ TWA, 500 ppm STEL; 1230 mg/m ³ STEL Canada - Saskatchewan - 200 ppm TWA, 400 ppm STEL Canada - Yukon - 400 ppm TWA; 980 mg/m ³ TWA, 500 ppm STEL; 1225 mg/m ³ STEL
Guanidinium Thiocyanate (Plug 4, Wash 1)	None known
Poly(oxy-1,2-ethanediyl), α -[4-(1,1,3,3-tetramethyl butyl)phenyl]- ω -hydroxy- (Plug 4)	None known

Appropriate engineering controls:

No special ventilation requirements. Apply technical measures to comply with the occupational exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Ensure adequate ventilation to keep airborne concentrations low. Do not empty waste into water drains.

Individual protection measures, such as personal protective equipment:

Eye/face protection: Not required under normal conditions of use.

Skin and hand protection: Not required under normal conditions of use. Wash hands after use.

Respiratory protection: Not required under normal conditions of use

General hygiene considerations: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Wash hands after use.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.):

Physical state: Liquid.

Color: Mixture - Beads appear black in cassette.
 Plug 1 - Colorless.
 Plug 2 - Colorless.
 Plug 3 - Colorless.
 Plug 4 - Colorless.

ARIES® Extraction Kit

	Wash 1 - Colorless.
	Wash 2 - Colorless.
	Elution - Colorless.
Odor:	Mixture - Odorless. Plug 1 - Odorless. Plug 2 - Odorless. Plug 3 - Odorless Plug 4 - Odorless Wash 1 - Odorless. Wash 2 - Odorless Elution - Odorless
Odor threshold:	Not determined
pH:	Not available
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	Not available.
Evaporation rate:	Not available
Flammability (solid, gas):	Contains flammable liquid
Upper/lower flammability or explosive limits	
Flammability limit – lower (%):	Not available
Flammability limit – upper (%):	Not available
Explosive limit – lower (%):	Not available
Explosive limit – upper (%):	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Solubility (ies):	Not available
Partition coefficient (n-octanol/water):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available

SECTION 10: Stability and reactivity

Reactivity:	This product is not expected to be reactive under normal handling and storage conditions.
Chemical stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Hazardous polymerization does 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.

ARIES[®] Extraction Kit

Incompatible materials: Strong oxidizing agents and moisture

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

SECTION 11: Toxicological information

Information on likely routes of exposure:

Inhalation: Expected to be a route of exposure

Ingestion: Expected to be a route of exposure

Skin: Expected to be a route of exposure

Eyes: Expected to be a route of exposure

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

Kit: Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

Plug 1: None known

Plug 2: Causes severe eye irritation.

Plug 3: Causes severe eye irritation.

Plug 4: Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

Wash 1: Causes severe skin burns and eye damage.

Wash 2: None known

Elution: None known

Delayed and immediate effects and chronic effects from short or long-term exposure:

No additional information known.

Numerical measures of toxicity (such as acute toxicity estimates):

Ingredient Information:

Substance	Test Type (species)	Value
Isopropanol (Plug 2, Plug 3, Wash 1)	LD ₅₀ Oral (Rat)	5840 mg/kg
	LD ₅₀ Dermal (Rabbit)	16.4 mL/kg
	LC ₅₀ Inhalation (Rat)	> 10,000 ppm 4h
Guanidinium Thiocyanate (Plug 4, Wash 1)	LD ₅₀ Oral (Rat)	354 mg/kg
	LD ₅₀ Dermal (Rabbit)	> 2000 mg/kg
	LC ₅₀ Inhalation (Rat)	> 17273 mg/L 4h
Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-	LD ₅₀ Oral (Rat)	None known
	LD ₅₀ Dermal (Rabbit)	None known

ARIES® Extraction Kit

tetramethylbutyl)phenyl]- ω-hydroxy- (Plug 4)	LC ₅₀ Inhalation (Rat)	None known
-----------------------------------------------------	-----------------------------------	------------

Skin corrosion/irritation:	Causes severe skin burns (Plug 4, Wash 1).
Serious eye damage/eye irritation:	Causes serious eye damage (Plug 4, Wash 1). Causes serious eye irritation (Plug 2, Plug 3)
Respiratory or skin sensitization:	Not expected to cause respiratory sensitization. Not expected to cause skin sensitization or allergic reaction.
Germ cell mutagenicity:	Not expected to cause genetic defects.
Carcinogenicity:	This product is not expected to cause cancer.
Reproductive toxicity:	Not expected to damage fertility or the unborn child.
STOT – Single exposure:	Not expected to cause specific target organ toxicity after a single exposure.
STOT – Repeat exposure:	Not expected to cause specific target organ toxicity after prolonged or repeated exposure.
Aspiration hazard:	This product is not anticipated to be an aspiration hazard if swallowed.

If the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA:

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropanol (Plug 2, Plug 3, Wash 1)	Not listed	Not listed	Not listed	Not listed
Guanidinium Thiocyanate (Plug 4, Wash 1)	Not listed	Not listed	Not listed	Not listed
Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethyl butyl)phenyl]-ω-hydroxy- (Plug 4)	Not listed	Not listed	Not listed	Not listed

SECTION 12: Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

Ingredient Information: Harmful to aquatic life with long lasting effects

Substance	Test Type	Species	Value
-----------	-----------	---------	-------

ARIES® Extraction Kit

Isopropanol (Plug 2, Plug 3, Wash 1)	LC ₅₀	Fish Pimephales promelas	9640 mg/L 96 h
	EC ₅₀	Invertebrates Daphnia magna	13299 mg/L 48 h
	EC ₅₀	Algae Desmodesmus subspicatus	>1000 mg/L 96 h
Guanidinium Thiocyanate (Plug 4, Wash 1)	LC ₅₀	Fish Poecilia reticulata	89.1 mg/l 96 h
	EC ₅₀	Invertebrates Daphnia magna	42.4 mg/L 48 h
	ErC ₅₀	Algae	None known
Poly(oxy-1,2- ethanediyl), α-[4- (1,1,3,3-tetramethyl butyl)phenyl]-ω- hydroxy- (Plug 4)	LC ₅₀	Fish Pimephales promelas	4 - 8.9 mg/l 96 h
	EC ₅₀	Invertebrates Daphnia magna	18 - 26 mg/L 48 h
	EC ₅₀	Algae	None known

Persistence and Degradability:

No data available for this product

Bioaccumulative Potential:

Isopropanol (Plug 2, Plug 3, Wash 1) - LogPow -0.05 Low potential

Mobility in Soil:

No data available for this product

Other adverse effects (such as hazardous to the ozone layer):

None known

SECTION 13: Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

Methods of disposal

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should 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.

Hazardous Waste

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

Contaminated packaging – methods of disposal

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered where recycling is not feasible.

Special precautions

This material and its container must be disposed of in a safe way. Care should be taken when

ARIES® Extraction Kit

handling empty 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 disposal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport Information

US Department of Transportation Classification (49CFR)

UN 1219 ISOPROPYL ALCOHOL solution, 3, II

IMDG (Transport by sea)

UN 1219 ISOPROPYL ALCOHOL solution, 3, II

IATA (Country variations may apply)

UN 1219 ISOPROPYL ALCOHOL solution, 3, II

Environmental hazards

Marine pollutant: No

Additional information:

DOT: Limited Quantity Exemption

IATA: Limited Quantity Exemption

IMDG: Emergency schedules F-A, S-P
Limited Quantity Exemption

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

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.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

None known

SECTION 15: Regulatory Information

USA:

United States Federal Regulations: This SDS complies with the OSHA, 29 CFR 1910.1200. The product is classified as hazardous under OSHA.

Toxic Substances Control Act (TSCA) – All of the ingredients are listed on the U.S. EPA TSCA Inventory List.

Emergency Planning and Community Right To-Know Act (EPCRA)

Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): None listed

ARIES® Extraction Kit

SARA HAZARD DESIGNATION SECTIONS 311/312 (40 CFR 370 (amended 2018)):

Flammable (gases, aerosols, liquids or solids)
Skin corrosion or irritation
Serious eye damage or eye irritation
Acute toxicity (any route of exposure)
Specific target organ toxicity (single or repeated exposure)

Section 313 Toxic Chemicals (40 CFR 372.65):

Isopropyl alcohol - 1.0 % de minimis concentration (only if manufactured by the strong acid process, no supplier notification)

STATE REGULATIONS:

This SDS contains specific health and safety data is applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state.

California Proposition 65 (California Safe Drinking Water and Toxic Enforcement Act of 1986): None listed.

Massachusetts Right to Know: Isopropanol is listed on the Massachusetts Right to Know list.

New Jersey Right to Know Isopropanol is listed on the New Jersey Right to Know List.

Pennsylvania Right to Know: Isopropanol is listed on the Pennsylvania Right to Know List.

CANADA:

This SDS complies with the requirements of WHMIS 2015.

Canadian NPRI: Isopropyl alcohol and Poly(oxy-1,2-ethanediyl), α -[4-(1,1,3,3-tetramethylbutyl)phenyl]- ω -hydroxy- are listed on the National Pollutant Release Inventory

DSL: The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

SECTION 16: Other Information

Revision Date: Aug 13, 2022

DISCLAIMER:

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes liability whatsoever for the accuracy or completeness of the information contained herein.

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.