

Indomethacin

TREVIGEN[®] Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 04/29/2015 Date of issue: 04/15/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Indomethacin

Product Code: 5010-024-04

1.2. Intended Use of the Product

No use is specified.

1.3. Name, Address, and Telephone of the Responsible Party

Company

Trevigen Inc.
8405 Helgerman Court
20877 Gaithersburg, MD 20877
T 1-800-TREVIGEN

1.4. Emergency Telephone Number

Emergency Number : 301-216-2800

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Flam. Liq. 2 H225

Acute Tox. 3 (Oral) H301

Eye Irrit. 2A H319

STOT SE 2 H371

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H225 - Highly flammable liquid and vapor.
H301 - Toxic if swallowed.
H319 - Causes serious eye irritation.
H371 - May cause damage to organs.

Precautionary Statements (GHS-US)

: P210 - Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, ventilating, and lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P310 - IF SWALLOWED: Immediately call a poison center or doctor.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

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contact lenses, if present and easy to do. Continue rinsing.
P330 - Rinse mouth.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.
P403+P235+P405 - Store in a well-ventilated place. Keep cool. Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

2.3. Other Hazards

Flammable vapors can accumulate in head space of closed systems. This material contains methanol, which, when ingested, may cause acidosis and ocular toxicity ranging from diminished visual capacity to complete blindness, and possible death.

2.4. Unknown Acute Toxicity (GHS-US) No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

| Name | Product Identifier | % (w/w) | Classification (GHS-US) |
|-------------------|--------------------|---------|--|
| Ethyl alcohol | (CAS No) 64-17-5 | 90.19 | Flam. Liq. 2, H225 Eye Irrit. 2A, H319 |
| Isopropyl alcohol | (CAS No) 67-63-0 | 4.46 | Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336 |
| Methyl alcohol | (CAS No) 67-56-1 | 4.46 | Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:vapor), H331 STOT SE 1, H370 |
| Indomethacin | (CAS No) 53-86-1 | 0.89 | Acute Tox. 1 (Oral), H300 |

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

Skin Contact: Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Do not induce vomiting. Rinse mouth. Seek medical attention if a large amount is swallowed.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation. Toxic if swallowed. May cause damage to organs (optic nerve, central nervous system).

Inhalation: May cause respiratory irritation.

Skin Contact: May cause skin irritation.

Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Ingestion: Harmful if swallowed. Symptoms may include: Gastrointestinal irritation. Weakness. Dizziness. Headache. Nausea. Convulsions. Unconsciousness.

Chronic Symptoms: May cause damage to organs, the optic nerve and the central nervous system. This material contains methanol, which, when ingested, may cause acidosis and ocular toxicity ranging from diminished visual capacity to complete blindness, and possible death.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

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SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO₂), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable or explosive vapor-air mixture.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Thermal decomposition generates: Carbon oxides (CO, CO₂). Formaldehyde.

Other Information: Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray. Use special care to avoid static electric charges.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use only non-sparking tools. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. - No smoking.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Ensure adequate ventilation. Comply with applicable regulations. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained. Container remains hazardous when empty. Continue to observe all precautions. Flammable vapors can accumulate in head space of closed systems. Proper grounding procedures to avoid static electricity should be followed. Take precautionary measures against static discharge. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep in fireproof place.

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers. Rubbers. Some plastics. zinc. Brass. Aluminum.

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7.3. Specific End Use(s)

No use is specified.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

| Ethyl alcohol (64-17-5) | | |
|--------------------------|--------------------------------------|--|
| Mexico | OEL TWA (mg/m ³) | 1900 mg/m ³ |
| Mexico | OEL TWA (ppm) | 1000 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 1000 ppm |
| USA ACGIH | ACGIH chemical category | Confirmed Animal Carcinogen with Unknown Relevance to Humans |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 1900 mg/m ³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 1000 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 1900 mg/m ³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 1000 ppm |
| USA IDLH | US IDLH (ppm) | 3300 ppm (10% LEL) |
| Alberta | OEL TWA (mg/m ³) | 1880 mg/m ³ |
| Alberta | OEL TWA (ppm) | 1000 ppm |
| British Columbia | OEL STEL (ppm) | 1000 ppm |
| Manitoba | OEL STEL (ppm) | 1000 ppm |
| New Brunswick | OEL TWA (mg/m ³) | 1880 mg/m ³ |
| New Brunswick | OEL TWA (ppm) | 1000 ppm |
| Newfoundland & Labrador | OEL STEL (ppm) | 1000 ppm |
| Nova Scotia | OEL STEL (ppm) | 1000 ppm |
| Nunavut | OEL STEL (mg/m ³) | 2355 mg/m ³ |
| Nunavut | OEL STEL (ppm) | 1250 ppm |
| Nunavut | OEL TWA (mg/m ³) | 1884 mg/m ³ |
| Nunavut | OEL TWA (ppm) | 1000 ppm |
| Northwest Territories | OEL STEL (mg/m ³) | 2355 mg/m ³ |
| Northwest Territories | OEL STEL (ppm) | 1250 ppm |
| Northwest Territories | OEL TWA (mg/m ³) | 1884 mg/m ³ |
| Northwest Territories | OEL TWA (ppm) | 1000 ppm |
| Ontario | OEL STEL (ppm) | 1000 ppm |
| Prince Edward Island | OEL STEL (ppm) | 1000 ppm |
| Québec | VEMP (mg/m ³) | 1880 mg/m ³ |
| Québec | VEMP (ppm) | 1000 ppm |
| Saskatchewan | OEL STEL (ppm) | 1250 ppm |
| Saskatchewan | OEL TWA (ppm) | 1000 ppm |
| Yukon | OEL STEL (mg/m ³) | 1900 mg/m ³ |
| Yukon | OEL STEL (ppm) | 1000 ppm |
| Yukon | OEL TWA (mg/m ³) | 1900 mg/m ³ |
| Yukon | OEL TWA (ppm) | 1000 ppm |
| Methyl alcohol (67-56-1) | | |
| Mexico | OEL TWA (mg/m ³) | 260 mg/m ³ |
| Mexico | OEL TWA (ppm) | 200 ppm |
| Mexico | OEL STEL (mg/m ³) | 310 mg/m ³ |
| Mexico | OEL STEL (ppm) | 250 ppm |
| USA ACGIH | ACGIH TWA (ppm) | 200 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 250 ppm |
| USA ACGIH | ACGIH chemical category | Skin - potential significant contribution to overall exposure by the |

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| | | |
|------------------------------------|---------------------------------------|------------------------|
| | | cutaneous route |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 260 mg/m ³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 200 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 260 mg/m ³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 200 ppm |
| USA NIOSH | NIOSH REL (STEL) (mg/m ³) | 325 mg/m ³ |
| USA NIOSH | NIOSH REL (STEL) (ppm) | 250 ppm |
| USA IDLH | US IDLH (ppm) | 6000 ppm |
| Alberta | OEL STEL (mg/m ³) | 328 mg/m ³ |
| Alberta | OEL STEL (ppm) | 250 ppm |
| Alberta | OEL TWA (mg/m ³) | 262 mg/m ³ |
| Alberta | OEL TWA (ppm) | 200 ppm |
| British Columbia | OEL STEL (ppm) | 250 ppm |
| British Columbia | OEL TWA (ppm) | 200 ppm |
| Manitoba | OEL STEL (ppm) | 250 ppm |
| Manitoba | OEL TWA (ppm) | 200 ppm |
| New Brunswick | OEL STEL (mg/m ³) | 328 mg/m ³ |
| New Brunswick | OEL STEL (ppm) | 250 ppm |
| New Brunswick | OEL TWA (mg/m ³) | 262 mg/m ³ |
| New Brunswick | OEL TWA (ppm) | 200 ppm |
| Newfoundland & Labrador | OEL STEL (ppm) | 250 ppm |
| Newfoundland & Labrador | OEL TWA (ppm) | 200 ppm |
| Nova Scotia | OEL STEL (ppm) | 250 ppm |
| Nova Scotia | OEL TWA (ppm) | 200 ppm |
| Nunavut | OEL STEL (mg/m ³) | 328 mg/m ³ |
| Nunavut | OEL STEL (ppm) | 250 ppm |
| Nunavut | OEL TWA (mg/m ³) | 262 mg/m ³ |
| Nunavut | OEL TWA (ppm) | 200 ppm |
| Northwest Territories | OEL STEL (mg/m ³) | 328 mg/m ³ |
| Northwest Territories | OEL STEL (ppm) | 250 ppm |
| Northwest Territories | OEL TWA (mg/m ³) | 262 mg/m ³ |
| Northwest Territories | OEL TWA (ppm) | 200 ppm |
| Ontario | OEL STEL (ppm) | 250 ppm |
| Ontario | OEL TWA (ppm) | 200 ppm |
| Prince Edward Island | OEL STEL (ppm) | 250 ppm |
| Prince Edward Island | OEL TWA (ppm) | 200 ppm |
| Québec | VECD (mg/m ³) | 328 mg/m ³ |
| Québec | VECD (ppm) | 250 ppm |
| Québec | VEMP (mg/m ³) | 262 mg/m ³ |
| Québec | VEMP (ppm) | 200 ppm |
| Saskatchewan | OEL STEL (ppm) | 250 ppm |
| Saskatchewan | OEL TWA (ppm) | 200 ppm |
| Yukon | OEL STEL (mg/m ³) | 310 mg/m ³ |
| Yukon | OEL STEL (ppm) | 250 ppm |
| Yukon | OEL TWA (mg/m ³) | 260 mg/m ³ |
| Yukon | OEL TWA (ppm) | 200 ppm |
| Isopropyl alcohol (67-63-0) | | |
| Mexico | OEL TWA (mg/m ³) | 980 mg/m ³ |
| Mexico | OEL TWA (ppm) | 400 ppm |
| Mexico | OEL STEL (mg/m ³) | 1225 mg/m ³ |
| Mexico | OEL STEL (ppm) | 500 ppm |

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| | | |
|------------------------------------|---------------------------------------|--|
| USA ACGIH | ACGIH TWA (ppm) | 200 ppm |
| USA ACGIH | ACGIH STEL (ppm) | 400 ppm |
| USA ACGIH | ACGIH chemical category | Not Classifiable as a Human Carcinogen |
| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 980 mg/m ³ |
| USA OSHA | OSHA PEL (TWA) (ppm) | 400 ppm |
| USA NIOSH | NIOSH REL (TWA) (mg/m ³) | 980 mg/m ³ |
| USA NIOSH | NIOSH REL (TWA) (ppm) | 400 ppm |
| USA NIOSH | NIOSH REL (STEL) (mg/m ³) | 1225 mg/m ³ |
| USA NIOSH | NIOSH REL (STEL) (ppm) | 500 ppm |
| USA IDLH | US IDLH (ppm) | 2000 ppm (10% LEL) |
| Alberta | OEL STEL (mg/m ³) | 984 mg/m ³ |
| Alberta | OEL STEL (ppm) | 400 ppm |
| Alberta | OEL TWA (mg/m ³) | 492 mg/m ³ |
| Alberta | OEL TWA (ppm) | 200 ppm |
| British Columbia | OEL STEL (ppm) | 400 ppm |
| British Columbia | OEL TWA (ppm) | 200 ppm |
| Manitoba | OEL STEL (ppm) | 400 ppm |
| Manitoba | OEL TWA (ppm) | 200 ppm |
| New Brunswick | OEL STEL (mg/m ³) | 1230 mg/m ³ |
| New Brunswick | OEL STEL (ppm) | 500 ppm |
| New Brunswick | OEL TWA (mg/m ³) | 983 mg/m ³ |
| New Brunswick | OEL TWA (ppm) | 400 ppm |
| Newfoundland & Labrador | OEL STEL (ppm) | 400 ppm |
| Newfoundland & Labrador | OEL TWA (ppm) | 200 ppm |
| Nova Scotia | OEL STEL (ppm) | 400 ppm |
| Nova Scotia | OEL TWA (ppm) | 200 ppm |
| Nunavut | OEL STEL (mg/m ³) | 1228 mg/m ³ |
| Nunavut | OEL STEL (ppm) | 500 ppm |
| Nunavut | OEL TWA (mg/m ³) | 983 mg/m ³ |
| Nunavut | OEL TWA (ppm) | 400 ppm |
| Northwest Territories | OEL STEL (mg/m ³) | 1228 mg/m ³ |
| Northwest Territories | OEL STEL (ppm) | 500 ppm |
| Northwest Territories | OEL TWA (mg/m ³) | 983 mg/m ³ |
| Northwest Territories | OEL TWA (ppm) | 400 ppm |
| Ontario | OEL STEL (ppm) | 400 ppm |
| Ontario | OEL TWA (ppm) | 200 ppm |
| Prince Edward Island | OEL STEL (ppm) | 400 ppm |
| Prince Edward Island | OEL TWA (ppm) | 200 ppm |
| Québec | VECD (mg/m ³) | 1230 mg/m ³ |
| Québec | VECD (ppm) | 500 ppm |
| Québec | VEMP (mg/m ³) | 985 mg/m ³ |
| Québec | VEMP (ppm) | 400 ppm |
| Saskatchewan | OEL STEL (ppm) | 400 ppm |
| Saskatchewan | OEL TWA (ppm) | 200 ppm |
| Yukon | OEL STEL (mg/m ³) | 1225 mg/m ³ |
| Yukon | OEL STEL (ppm) | 500 ppm |
| Yukon | OEL TWA (mg/m ³) | 980 mg/m ³ |
| Yukon | OEL TWA (ppm) | 400 ppm |

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8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Explosion-proof general and local exhaust ventilation. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Gas detectors should be used when flammable gases/vapors may be released. Ground/bond container and receiving equipment. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles. Protective clothing. Gloves. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Impermeable protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

| | |
|---|--|
| Physical State | : Liquid |
| Appearance | : Not available |
| Odor | : Not available |
| Odor Threshold | : Not available |
| pH | : Not available |
| Evaporation Rate | : Not available |
| Melting Point | : Not available |
| Freezing Point | : Not available |
| Boiling Point | : Not available |
| Flash Point | : Not available |
| Auto-ignition Temperature | : Not available |
| Decomposition Temperature | : Not available |
| Flammability (solid, gas) | : Not available |
| Lower Flammable Limit | : Not available |
| Upper Flammable Limit | : Not available |
| Vapor Pressure | : Not available |
| Relative Vapor Density at 20 °C | : Not available |
| Relative Density | : Not available |
| Specific Gravity | : Not available |
| Solubility | : Not available |
| Partition Coefficient: N-Octanol/Water | : Not available |
| Viscosity | : Not available |
| Explosion Data – Sensitivity to Mechanical Impact | : Not expected to present an explosion hazard due to mechanical impact |
| Explosion Data – Sensitivity to Static Discharge | : Static discharge could act as an ignition source |

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SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.
- 10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Plastic. Rubbers. zinc. Brass. Aluminium (at high temperatures).
- 10.6. Hazardous Decomposition Products:** Thermal decomposition generates: Carbon oxides (CO, CO₂). Will decompose above 150 °C (> 300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Oral: Toxic if swallowed.

LD50 and LC50 Data:

| Indomethacin | |
|---------------|-------------------------|
| ATE US (oral) | 54.81 mg/kg body weight |

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause damage to organs

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: May cause respiratory irritation

Symptoms/Injuries After Skin Contact: May cause skin irritation

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision

Symptoms/Injuries After Ingestion: Harmful if swallowed. Symptoms may include: Gastrointestinal irritation. Weakness. Dizziness. Headache. Nausea. Convulsions. Unconsciousness

Chronic Symptoms: May cause damage to organs, the optic nerve and the central nervous system. This material contains methanol, which, when ingested, may cause acidosis and ocular toxicity ranging from diminished visual capacity to complete blindness, and possible death

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

| Ethyl alcohol (64-17-5) | |
|-----------------------------|-----------------------------------|
| LD50 Oral Rat | 10470 mg/kg |
| LD50 Dermal Rat | 20 ml/kg |
| LC50 Inhalation Rat | 124.7 mg/l/4h |
| Methyl alcohol (67-56-1) | |
| LC50 Inhalation Rat | 22500 ppm (Exposure time: 8 h) |
| ATE US (oral) | 100.00 mg/kg body weight |
| ATE US (dermal) | 300.00 mg/kg body weight |
| ATE US (vapors) | 3.00 mg/l/4h |
| Isopropyl alcohol (67-63-0) | |
| LD50 Oral Rat | 4710 mg/kg |
| LD50 Dermal Rabbit | 4059 mg/kg |
| LC50 Inhalation Rat | 72.6 mg/l/4h (Exposure time: 4 h) |

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| | |
|--|---|
| Indomethacin (53-86-1) | |
| ATE US (oral) | 0.50 mg/kg body weight |
| Ethyl alcohol (64-17-5) | |
| OSHA Hazard Communication Carcinogen List | In OSHA Hazard Communication Carcinogen list. |
| Isopropyl alcohol (67-63-0) | |
| IARC Group | 3 |

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity Not classified

| | |
|---------------------------------------|--|
| Ethyl alcohol (64-17-5) | |
| LC50 Fish 1 | 12.0 - 16.0 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) |
| EC50 Daphnia 1 | 9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| LC 50 Fish 2 | > 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| Methyl alcohol (67-56-1) | |
| LC50 Fish 1 | 28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| LC 50 Fish 2 | > 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| Isopropyl alcohol (67-63-0) | |
| LC50 Fish 1 | 9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1 | 13299 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| EC50 Other Aquatic Organisms 1 | 1000 mg/l (Exposure time: 96 h - Species: Desmodesmus subspicatus) |
| LC 50 Fish 2 | 11130 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |
| EC50 Other Aquatic Organisms 2 | 1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus) |

12.2. Persistence and Degradability

| | |
|--------------------------------------|------------------|
| Ethyl alcohol (64-17-5) | |
| Persistence and Degradability | Not established. |

12.3. Bioaccumulative Potential

| | |
|------------------------------------|------------------|
| Ethyl alcohol (64-17-5) | |
| Log Pow | -0.32 |
| Bioaccumulative Potential | Not established. |
| Methyl alcohol (67-56-1) | |
| BCF Fish 1 | < 10 |
| Log Pow | -0.77 |
| Isopropyl alcohol (67-63-0) | |
| Log Pow | 0.05 (at 25 °C) |

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: Do not empty into drains; dispose of this material and its container in a safe way.

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Handle empty containers with care because residual product is flammable.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance with DOT

Proper Shipping Name : ETHANOL SOLUTIONS
Hazard Class : 3
Identification Number : UN1170
Label Codes : 3
Packing Group : II



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ERG Number : 127

14.2. In Accordance with IMDG

Proper Shipping Name : ETHANOL SOLUTION

Hazard Class : 3

Identification Number : UN1170

Packing Group : II

Label Codes : 3

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-D



14.3. In Accordance with IATA

Proper Shipping Name : ETHANOL SOLUTION

Packing Group : II

Identification Number : UN1170

Hazard Class : 3

Label Codes : 3

ERG Code (IATA) : 3L



14.4. In Accordance with TDG

Proper Shipping Name : ETHANOL SOLUTION

Packing Group : II

Hazard Class : 3

Identification Number : UN1170

Label Codes : 3



SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

| | |
|---|--|
| Indomethacin | |
| SARA Section 311/312 Hazard Classes | Fire hazard Immediate (acute) health hazard |
| Ethyl alcohol (64-17-5) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |
| Methyl alcohol (67-56-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313 | |
| SARA Section 311/312 Hazard Classes | Delayed (chronic) health hazard Immediate (acute) health hazard Fire hazard |
| SARA Section 313 - Emission Reporting | 1.0 % |
| Isopropyl alcohol (67-63-0) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313 | |
| EPA TSCA Regulatory Flag | T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA. |
| SARA Section 313 - Emission Reporting | 1.0 % (only if manufactured by the strong acid process, no supplier notification) |
| Indomethacin (53-86-1) | |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory | |

15.2. US State Regulations

| | |
|--|--|
| Ethyl alcohol (64-17-5) | |
| U.S. - California - Proposition 65 - Carcinogens List | WARNING: This product contains chemicals known to the State of California to cause cancer. |
| U.S. - California - Proposition 65 - Developmental Toxicity | WARNING: This product contains chemicals known to the State of |


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| | |
|---|---|
| | California to cause birth defects. |
| Methyl alcohol (67-56-1) | |
| U.S. - California - Proposition 65 - Developmental Toxicity | WARNING: This product contains chemicals known to the State of California to cause birth defects. |
| Ethyl alcohol (64-17-5) | |
| U.S. - Massachusetts - Right To Know List | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| U.S. - Pennsylvania - RTK (Right to Know) List | |
| Methyl alcohol (67-56-1) | |
| U.S. - Massachusetts - Right To Know List | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List | |
| U.S. - Pennsylvania - RTK (Right to Know) List | |
| Isopropyl alcohol (67-63-0) | |
| U.S. - Massachusetts - Right To Know List | |
| U.S. - New Jersey - Right to Know Hazardous Substance List | |
| U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List | |
| U.S. - Pennsylvania - RTK (Right to Know) List | |
| Indomethacin (53-86-1) | |
| U.S. - Massachusetts - Right To Know List | |

15.3. Canadian Regulations

| | |
|---|--|
| Indomethacin | |
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects |
|  | |
| Ethyl alcohol (64-17-5) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Listed on the Canadian IDL (Ingredient Disclosure List) | |
| IDL Concentration 0.1 % | |
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
| Methyl alcohol (67-56-1) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Listed on the Canadian IDL (Ingredient Disclosure List) | |
| IDL Concentration 1 % | |
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects |
| Isopropyl alcohol (67-63-0) | |
| Listed on the Canadian DSL (Domestic Substances List) | |
| Listed on the Canadian IDL (Ingredient Disclosure List) | |
| IDL Concentration 1 % | |
| WHMIS Classification | Class B Division 2 - Flammable Liquid Class D Division 2 Subdivision B - Toxic material causing other toxic effects |
| Indomethacin (53-86-1) | |
| Listed on the Canadian DSL (Domestic Substances List) | |

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| | |
|----------------------|--|
| WHMIS Classification | Class D Division 1 Subdivision A - Very toxic material causing immediate and serious toxic effects |
|----------------------|--|

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 04/29/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

| | |
|---------------------------------|---|
| Acute Tox. 1 (Oral) | Acute toxicity (oral) Category 1 |
| Acute Tox. 3 (Dermal) | Acute toxicity (dermal) Category 3 |
| Acute Tox. 3 (Inhalation:vapor) | Acute toxicity (inhalation:vapor) Category 3 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral) Category 3 |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Flam. Liq. 2 | Flammable liquids Category 2 |
| STOT SE 1 | Specific target organ toxicity (single exposure) Category 1 |
| STOT SE 2 | Specific target organ toxicity (single exposure) Category 2 |
| STOT SE 3 | Specific target organ toxicity (single exposure) Category 3 |
| H225 | Highly flammable liquid and vapor |
| H300 | Fatal if swallowed |
| H301 | Toxic if swallowed |
| H311 | Toxic in contact with skin |
| H319 | Causes serious eye irritation |
| H331 | Toxic if inhaled |
| H336 | May cause drowsiness or dizziness |
| H370 | Causes damage to organs |
| H371 | May cause damage to organs |

Party Responsible for the Preparation of This Document

Trivigen INC. 8405 Helgerman Court Gaithersburg, MD 20877 T: 301-216-2800

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2