SDS—Sensors except formaldehyde and hydrazine

SECTION 1: IDENTIFICATION

Revision Date: 09/10/2019

Product Name: Bromine, Carbon Monoxide, Chlorine, Chlorine Dioxide, Ethylene, Ethylene Oxide, Hydrogen, Hydrogen Bromide, Hydrogen Chloride, Hydrogen Cyanide, Hydrogen Peroxide, Hydrogen Sulfide, Nitric Oxide, Ozone, peracetic Acid, Propylene Oxide, and Sulfur Dioxide Sensor.

Company: Interscan Corporation 4590 Ish Dr., #110 Simi Valley, CA. 93063 United States

Interscan Corporation: (818) 882-2331

Emergency Contact: (805) 501-7551

Recommended use: For use only in Interscan Monitors or Interscan OEMs in good standing.

SECTION 2: HAZARD(S) IDENTIFICATION

Single word

Warning



Hazard statement(s) H302 H314 H351

Precautionary statement(s)

P260 P264 P270 P301 + P312 Harmful if swallowed. Causes severe skin burns and eye damage. Suspected of causing cancer

Do not breathe dust or mist. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

| P301 + P330 + P331 | IF SWALLOWED: Rinse mouth. Do NOT induce |
|--------------------|--|
| P303 + P361 + P353 | IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor. |
| P363 | Wash contaminated clothing before reuse. |
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| INGREDIENT | CAS NUMBER | <mark>% (WEIGHT)</mark> |
|--------------------------------|--------------|-------------------------|
| Sulfuric Acid | 7664-93-9 | <1% |
| Biopersistent glass microfiber | Not Assigned | <33% |
| HIVAL [®] PS HI 5308M | Not Assigned | <38.5% |
| Lead Dioxide | 1309-60-0 | <10% |

SECTION 4: FIRST-AID MEASURES

| Electrolyte (liquid) contact with skin Electrolyte (liquid) contact with eyes | Immediately rinse well with water. Remove contact lens and immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist. |
|--|--|
| | |

SECTION 5: FIRE-FIGHTING MEASURES

| Extinguishing media | Use CO_2 , alcohol resistant foam, dry chemical. DO NOT USE WATER! |
|--|---|
| Special protective equipment for Firefighters | Wear self-contained breathing apparatus for firefighting if necessary. |
| Hazardous combustion products | Carbon Oxides, Sulfur Oxides of Hydrogen. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

| Methods and materials for containment | Avoid breathing vapors. Take up mechanically without creating |
|---------------------------------------|--|
| and cleaning up | dust. Neutralize with mild Alkaline solution. Clean area with water. |

SECTION 7: HANDLING AND STORAGE

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Glass Microfiber Components workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|--------------------------------|--------------|-------------------------------------|---|-------|
| Biopersistent glass microfiber | Not Assigned | TWA | 1 fibre/cm3 | ACGIH |
| Nuisance dust | Not Assigned | TWA (Total particulate) | 15 mg/m3 | OSHA |
| | | TWA | 5 mg/m3 | OSHA |
| | | (Respirable fraction) | | |

Sulfuric Acid Components workplace control parameters

| Component | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|---|--|--|
| Sulfuric acid | TWA: 0.2 mg/m ³ | (Vacated) TWA: 1 mg/m ³ TWA: 1 mg/m ³ | IDLH: 15 mg/m ³ TWA: 1 mg/m ³ |
| | | | |
| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
| Sulfuric acid | TWA: 1 mg/m ³ STEL: 3 mg/m ³ | TWA: 1 mg/m ³ | TWA: 0.2 mg/m ³ |

Legend

I]

ACGIH - American Conference of Governmental Industrial Hygienists

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical Properties:

| a) | Appearance | Form: Liquid |
|----|---------------------------------|--|
| | | Color: Clear, Colorless to brown |
| b) | Odor | odorless |
| c) | Odor Threshold | No data available |
| d) | рН | 0.3 (1N) |
| e) | Melting Point/freezing point | Melting Point: 10°C (50°F) |
| f) | Initial boiling point and | 290 – 338 °C (554 – 640.4 °F) |
| g) | Flash Point | Not applicable |
| h) | Evaporation rate | Will not evaporate at ambient conditions |

Storage

| i) | Flammability (solid, gas) | No data available |
|----|---------------------------|---|
| j) | Upper/lower | No data available |
| | flammability or | |
| | explosive limits | |
| k) | Vapor Pressure | < 0.001 mmHg @ 20 °C |
| I) | Vapor density | No Data Available |
| m) | Relative density | >1.67 (75% solution), 1.84 (98% solution) |
| n) | Water solubility | Soluble in water |
| o) | Partition coefficient: n- | No data available |
| | octanol/water | |
| p) | Auto-ignition | No data available |
| | temperature | |
| q) | Decomposition | No data available |
| | temperature | |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| t) | Oxidizing properties | Moderately Strong |

II] Biopersistent glass microfiber

| a) | Appearance | Fiber Glass |
|----|---------------------------------|-------------------|
| | | Color: white |
| b) | Odor | odorless |
| c) | Odor Threshold | No data available |
| d) | рН | No data available |
| e) | Melting Point/freezing point | No data available |
| f) | Initial boiling point and | No data available |
| g) | Flash Point | Not applicable |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Upper/lower | No data available |
| | flammability or | |
| | explosive limits | |
| k) | Vapor Pressure | No data available |
| I) | Vapor density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n- | No data available |
| | octanol/water | |
| p) | Auto-ignition | No data available |
| | temperature | |
| q) | Decomposition | No data available |
| | temperature | |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |

| | t) | Oxidizing properties | No data available |
|------|----------|--|-------------------------------------|
| III] | HIVAL® | PS HI 5308M | |
| | a) | Appearance | Form: Solid Color: Black |
| | b) | Odor | faint |
| | c) | Odor Threshold | No data available |
| | d) | рН | No data available |
| | e) | Melting Point/freezing | 79 - 135°C (174- 275°F) |
| | | point range | |
| | f) | Initial boiling point and | No data available |
| | g) | Flash Point | Not applicable |
| | h) | Evaporation rate | No data available |
| | i) | Flammability (solid, gas) | No data available |
| | J) | Upper/lower flammability.or | No data available |
| | | explosive limits | |
| | k) | Vapor Pressure | No data available |
| | I) | Vapor density | No data available |
| | m) | Relative density | 1.03 -1.05 @ 20 – 25 °C (68 - 77°F) |
| | n) | Water solubility | insoluble |
| | o) | Partition coefficient: n- octanol/water | No data available |
| | p) | Auto-ignition | 400°C (752°F) |
| | | temperature | |
| | q) | Decomposition | No data available |
| | r) | Viscosity | No data available |
| | s) | Explosive properties | No data available |
| | t) | Oxidizing properties | No data available |
| | , | | |
| IVJ | Lead Di | oxide | Dark Presson Calid |
| | a) b) | Odor | odorless |
| | D) c) | Odor Threshold | No data available |
| | d) | nH | No data available |
| | e) | Melting Point/freezing | 290°C |
| | -, | point | |
| | f) | Initial boiling point and | No data available |
| | g) | Flash Point | Not applicable |
| | h) | Evaporation rate | No data available |
| | i) | Flammability (solid, gas) | No data available |
| | j) | Upper/lower flammability or | No data available |

| | explosive limits | |
|----|---------------------------|-------------------|
| k) | Vapor Pressure | No data available |
| I) | Vapor density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | Insoluble |
| o) | Partition coefficient: n- | No data available |
| | octanol/water | |
| p) | Auto-ignition | No data available |
| | temperature | |
| q) | Decomposition | >290°C |
| | temperature | |
| r) | Viscosity | No data available |
| s) | Explosive properties | No data available |
| | | |

SECTION 10: STABILITY AND REACTIVITY

| I] | Sulfuric Acid | |
|------|-------------------------------------|---|
| | Reactivity: Chemical stability: | Reacts violently with water, exothermic, hygroscopic. Stable under recommended storage conditions. |
| | Possibility of hazardous reactions: | No data available. |
| | Hazardous decomposition products: | Sulfur Oxide, Hydrogen |
| | Other decomposition products: | No data available |
| II] | Biopersistent glass microfiber | |
| | Reactivity : | No decomposition if stored and applied as directed. |
| | Chemical stability : | No decomposition if stored and applied as directed. |
| | Possibility of hazardous reactions: | Stable under recommended storage conditions. |
| | | No hazards to be specially mentioned. |
| | Conditions to avoid : | No data available |
| III] | HIVAL [®] PS HI 5308M | |
| | Reactivity: | No Dangerous reaction known under conditions of normal |
| | | |
| | | ust. |
| | Chemical stability: | Stable under normal conditions |
| | Possibility of bazardous reactions | Stable under normal conditions |
| | | |
| | Conditions to avoid: | Keep away from heat and flame |
| | | · · |

IV] Lead Dioxide

| Reactivity: | Reacts with metallic powders |
|-------------------------------------|---|
| Chemical stability: | Stable under normal conditions |
| Possibility of hazardous reactions: | None under normal processing |
| Conditions to avoid: | Incompatible materials and dust formation |
| Hazardous decomposition products: | Lead Oxides. Oxygen Gases. |

SECTION 11: TOXICOLOGICAL INFORMATION

Sulfuric Acid: I]

| Acute toxicity: | LD50 Oral - Rat - > 2000 mg/kg Inhalation: LC50 = 510 mg/m3 (Rat) 2 h Dermal: ATE > 2000 mg/kg |
|------------------------------------|--|
| Skin corrosion/irritation: | Skin - Rabbit |
| | Result: Skin irritation - immediate |
| Serious eye damage/eye irritation: | Eyes - Rabbit |
| | Result: Severe eye burn |
| Respiratory or skin sensitization: | Severe burning to skin |
| Germ cell mutagenicity: | No data available |

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen. Exposure to strong inorganic mists containing sulfuric acid may cause cancer by inhalation.

| Component | CAS-No | IARC | NTP | ACGIH | OSHA | Mexico |
|---------------|-----------|---------|-------|-------|------|--------|
| Sulfuric acid | 7664-93-9 | Group 1 | Known | A2 | Х | A2 |

| IARC: | IARC: (International Agency for Research on Cancer) |
|--|--|
| | Group 1 - Carcinogenic to Humans |
| | Group 2A - Probably Carcinogenic to Humans |
| | Group 2B - Possibly Carcinogenic to Humans |
| ACGIH: | A1 - Known Human Carcinogen |
| | A2 - Suspected Human Carcinogen |
| | A3 - Animal Carcinogen |
| NTP: | NTP: (National Toxicity Program) |
| | Known - Known Carcinogen |
| | Reasonably Anticipated - Reasonably Anticipated to be |
| | a Human Carcinogen |
| Reproductive toxicity: | No data available |
| Specific target organ toxicity | No data available |
| - single exposure: | |
| Specific target organ toxicity | No data available |
| repeated exposure: | |
| Aspiration hazard: | No data available |
| Additional Information | |
| Symptoms / effects, both acute and | Product is a corrosive material. Use of gastric lavage or emesis |
| Delayed | is contraindicated. Possible perforation of stomach or |
| | esophagus should be investigated. Ingestion causes |

| | Endocrine Disruptor Information | severe swelling, severe damage to delicate tissue and danger of perforation. No data available | | | |
|------|---------------------------------|---|--|--|--|
| 11] | Biopersistent glass microfiber | | | | |
| | IARC Group 3: | Not classifiable as to its carcinogenicity to humans Biopersistent glass microfiber | | | |
| | OSHA: | Suspected human carcinogen | | | |
| | NTP: | Reasonably anticipated to be a human carcinogen | | | |
| III] | HIVAL [®] PS HI 5308M | | | | |

No eye irritation

No data available

No data available

Classification not possible

No toxicity to reproduction

The substance or mixture has no acute oral toxicity

Does not cause respiratory or skin sensitization

Not classifiable as a human carcinogen

The substance or mixture has no acute inhalation toxicity

The substance or mixture has no acute dermal toxicity

Acute oral toxicity: Acute Inhalation toxicity: Acute dermal toxicity: Serious eye damage/irritation: Respiratory or skin sensitization: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific Target Organ Toxicity -single exposure: -repeated exposure

IV] Lead Dioxide

| Acute toxicity: | No additional information |
|-----------------------------|---|
| Chrontic toxicity: | No additional information |
| Corrosion Irritation: | No additional information |
| Sensitization: | No additional information |
| Single Target Organ (STOT): | 1309-60-0 Large dust exposure may cause encephalopathy, |
| | seizures, coma, and cardio respiratory arrest. |
| | Central Nervous System impairment, Hematologic effects, |
| | and Peripheral Nervous System impairment. |
| Numerical Measures: | No additional information |
| Carcinogenicity: | 1309-60-0: OSHA specifically regulated carcinogen (Lead |
| | Dioxide) |
| Mutagenicity: | No additional information |
| Reproductive toxicity: | 1309-60-0 May cause congenital malformation in the fetus. |
| | Known human reproductive toxicant. |

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Freshwater Water Environment

Very toxic to aquatic environment. May cause long term May cause log-term adverse effects in aquatic Environment.

Persistence and degradability **Bioaccumulative potential** Mobility in soil Other adverse effects

No data available No data available No data available No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of residual product:

In accordance with local and national regulations.

SECTION 14: TRANSPORT INFORMATION

SARA 304 Extremely Hazardous Substances

International transport regulations

These products are not classified as dangerous goods according to international transport regulations.

| SECTION 15: REGULATORY INFORMATION | | | | | |
|--|---|--|--|--|--|
| SARA 302 Components | No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. | | | | |
| SARA 311/312 Hazard Catagories Acute Health Chronic Health Fire Sudden Release of Pressure Reactive | Yes Yes No No Yes | | | | |
| SARA 313 Components | This material does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, Section 313. | | | | |

This material does not contain any components with a section 304 EHS RQ. This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61). This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

U.S. State Right-to-Know

Regulations

Reportable Quantity

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---------------|---------------|------------|--------------|----------|--------------|
| Sulfuric acid | Х | Х | Х | Х | Х |

California Prop. 65 Components

Glass wool fibers (inhalable and biopersistent) CERCLA Reportable Quantity

DSL:

WARNING! This product contains a chemical known to the State of California to cause cancer. Not Assigned This material does not contain any components with a CERCLA RQ. All components of this product are on the Canadian DSL.

SECTION 16: OTHER INFORMATION

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.