

# SAFETY DATA SHEET

**1. Identification**

**Product identifier:** ALUMINUM ETCH 80-15-3-2

**Other means of identification**

**Product No.:** 5459

**Recommended use and restriction on use**

**Recommended use:** Not determined.

**Restrictions on use:** Not determined.

**Details of the supplier of the safety data sheet**

|                 |                                     |
|-----------------|-------------------------------------|
|                 | Avantor Performance Materials, LLC. |
|                 | 3477 Corporate Parkway              |
|                 | Center Valley, PA 18034             |
| Telephone:      |                                     |
|                 | Customer Service: 855-282-6867      |
| Fax:            | 610-573-2610                        |
| Contact Person: | Environmental Health & Safety       |
| E-mail:         | info@avantormaterials.com           |

**Emergency telephone number:**

CHEMTREC: 1-800-424-9300 within US and Canada

**2. Hazard(s) identification**

**Hazard Classification**

**Physical Hazards**

|                    |            |
|--------------------|------------|
| Corrosive to metal | Category 1 |
|--------------------|------------|

**Health Hazards**

|                                   |             |
|-----------------------------------|-------------|
| Acute toxicity (Oral)             | Category 4  |
| Skin Corrosion/Irritation         | Category 1A |
| Serious Eye Damage/Eye Irritation | Category 1  |

**Unknown toxicity - Health**

|  |       |
|--|-------|
| Acute toxicity, oral                     | 0 %   |
| Acute toxicity, dermal                   | 0 %   |
| Acute toxicity, inhalation, vapor        | 100 % |
| Acute toxicity, inhalation, dust or mist | 100 % |

**Unknown toxicity - Environment**

|  |      |
|--|------|
| Acute hazards to the aquatic environment | 65 % |
|--|------|

Chronic hazards to the aquatic environment 80 %

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** Causes severe skin burns and eye damage.  
Harmful if swallowed.  
May be corrosive to metals.

**Precautionary Statements**

**Prevention:** Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product. Keep only in original packaging.

**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]. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Absorb spillage to prevent material damage.

**Storage:** Store locked up. Store in a corrosion-resistant container with a resistant inner liner.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

**3. Composition/information on ingredients**

**Mixtures**

| Chemical name   | Common name and synonyms | CAS number | Content in percent (%)* |
|-----------------|--------------------------|------------|-------------------------|
| Phosphoric acid |                          | 7664-38-2  | 60 - 90%                |
| Acetic acid     |                          | 64-19-7    | 5 - 20%                 |
| Nitric acid     |                          | 7697-37-2  | 1 - 5%                  |

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

**General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

**Ingestion:** Rinse mouth. Get medical attention if symptoms occur. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. Apply artificial respiration if victim is not breathing Call a physician or poison control center immediately.

**Skin Contact:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation persists after washing. In case of irritation from airborne exposure, move to fresh air.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** Causes severe skin and eye burns.

**Hazards:** None known.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically. Symptoms may be delayed.

**5. Fire-fighting measures**

**General Fire Hazards:** In case of fire and/or explosion do not breathe fumes.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media:** None known.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed. Product is highly caustic. Product is acidic. Wear appropriate protective gear if spilled during firefighting.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. Accidental release measures**

|   |   |
|---|---|
| <b>Personal precautions, protective equipment and emergency procedures:</b> | Keep unauthorized personnel away. Keep upwind. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. See Section 8 of the SDS for Personal Protective Equipment. |
| <b>Methods and material for containment and cleaning up:</b>                | Neutralize with lime or soda ash. Neutralize spill area and washings with dilute acetic acid. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and disposal.                              |
| <b>Notification Procedures:</b>   | Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.   |
| <b>Environmental Precautions:</b>   | Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.   |

## 7. Handling and storage

|  |   |
|--|---|
| <b>Precautions for safe handling:</b>                                | Wear protective gloves/protective clothing/eye protection/face protection. Do not taste or swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Use caution when adding this material to water. See Section 8 of the SDS for Personal Protective Equipment. Avoid contact with eyes. Avoid contact with skin. |
| <b>Conditions for safe storage, including any incompatibilities:</b> | Keep away from food, drink and animal feeding stuffs. Keep container tightly closed. Store in a cool and well-ventilated place. Store in a corrosion-resistant container with a resistant inner liner. Do not store in metal containers. Store locked up.   |

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

| Chemical Identity | Type       | Exposure Limit Values | Source  |
|-------------------|------------|-----------------------|---|
| Phosphoric acid   | STEL       | 3 mg/m <sup>3</sup>   | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
|                   | TWA        | 1 mg/m <sup>3</sup>   | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
| Phosphoric acid   | TWA        | 1 mg/m <sup>3</sup>   | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|                   | STEL       | 3 mg/m <sup>3</sup>   | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Phosphoric acid   | TWA        | 1 mg/m <sup>3</sup>   | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)  |
|                   | STEL       | 3 mg/m <sup>3</sup>   | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)  |
| Phosphoric acid   | TWA        | 1 mg/m <sup>3</sup>   | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
|                   | STEL       | 3 mg/m <sup>3</sup>   | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Phosphoric acid   | 8 HR ACL   | 1 mg/m <sup>3</sup>   | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)  |
|                   | 15 MIN ACL | 3 mg/m <sup>3</sup>   | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)  |

|                 |            |                             |   |
|-----------------|------------|-----------------------------|---|
| Phosphoric acid | TWA        | 1 mg/m <sup>3</sup>         | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
|                 | STEL       | 3 mg/m <sup>3</sup>         | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
| Phosphoric acid | TWA        | 1 mg/m <sup>3</sup>         | US. ACGIH Threshold Limit Values (2011)   |
|                 | STEL       | 3 mg/m <sup>3</sup>         | US. ACGIH Threshold Limit Values (2011)   |
| Acetic acid     | STEL       | 15 ppm 37 mg/m <sup>3</sup> | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
|                 | TWA        | 10 ppm 25 mg/m <sup>3</sup> | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
| Acetic acid     | STEL       | 15 ppm                      | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|                 | TWA        | 10 ppm                      | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Acetic acid     | TWA        | 10 ppm                      | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)  |
|                 | STEL       | 15 ppm                      | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)  |
| Acetic acid     | STEL       | 15 ppm                      | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
|                 | TWA        | 10 ppm                      | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Acetic acid     | 8 HR ACL   | 10 ppm                      | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)  |
|                 | 15 MIN ACL | 15 ppm                      | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)  |
| Acetic acid     | TWA        | 10 ppm 25 mg/m <sup>3</sup> | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
|                 | STEL       | 15 ppm 37 mg/m <sup>3</sup> | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
| Acetic acid     | TWA        | 10 ppm                      | US. ACGIH Threshold Limit Values (2011)   |
|                 | STEL       | 15 ppm                      | US. ACGIH Threshold Limit Values (2011)   |
| Nitric acid     | STEL       | 4 ppm 10 mg/m <sup>3</sup>  | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
|                 | TWA        | 2 ppm 5,2 mg/m <sup>3</sup> | Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)   |
| Nitric acid     | TWA        | 2 ppm                       | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
|                 | STEL       | 4 ppm                       | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Nitric acid     | TWA        | 2 ppm                       | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)  |
|                 | STEL       | 4 ppm                       | Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act) (03 2011)  |
| Nitric acid     | STEL       | 4 ppm                       | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
|                 | TWA        | 2 ppm                       | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)  |
| Nitric acid     | 8 HR ACL   | 2 ppm                       | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)  |
|                 | 15 MIN ACL | 4 ppm                       | Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) (05 2009)  |
| Nitric acid     | TWA        | 2 ppm 5,2 mg/m <sup>3</sup> | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |
|                 | STEL       | 4 ppm 10 mg/m <sup>3</sup>  | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)  |

|             |      |       |  |
|-------------|------|-------|--|
|             |      |       | Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Nitric acid | STEL | 4 ppm | US. ACGIH Threshold Limit Values (2011)                              |
|             | TWA  | 2 ppm | US. ACGIH Threshold Limit Values (2011)                              |

**Appropriate Engineering Controls** No data available.

**Individual protection measures, such as personal protective equipment**

**General information:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. 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. An eye wash and safety shower must be available in the immediate work area.

**Eye/face protection:** Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

**Skin Protection**

**Hand Protection:** Chemical resistant gloves

**Other:** Wear suitable protective clothing.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Hygiene measures:** Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Do not get this material in contact with skin. Do not get in eyes.

**9. Physical and chemical properties**

**Appearance**

**Physical state:** Liquid  
**Form:** Liquid  
**Color:** Colorless  
**Odor:** Odorless  
**Odor threshold:** No data available.  
**pH:** No data available.  
**Melting point/freezing point:** No data available.  
**Initial boiling point and boiling range:** No data available.  
**Flash Point:** Not applicable  
**Evaporation rate:** No data available.  
**Flammability (solid, gas):** No data available.  
**Upper/lower limit on flammability or explosive limits**  
**Flammability limit - upper (%):** No data available.  
**Flammability limit - lower (%):** No data available.

|   |                    |
|---|--------------------|
| <b>Explosive limit - upper (%):</b>             | No data available. |
| <b>Explosive limit - lower (%):</b>             | No data available. |
| <b>Vapor pressure:</b>                          | No data available. |
| <b>Vapor density:</b>                           | No data available. |
| <b>Density:</b>                                 | No data available. |
| <b>Relative density:</b>                        | No data available. |
| <b>Solubility(ies)</b>                          |                    |
| <b>Solubility in water:</b>                     | Completely Soluble |
| <b>Solubility (other):</b>                      | No data available. |
| <b>Partition coefficient (n-octanol/water):</b> | No data available. |
| <b>Auto-ignition temperature:</b>               | No data available. |
| <b>Decomposition temperature:</b>               | No data available. |
| <b>Viscosity:</b>                               | No data available. |

## 10. Stability and reactivity

|  |  |
|--|--|
| <b>Reactivity:</b>                         | No dangerous reaction known under conditions of normal use.  |
| <b>Chemical Stability:</b>                 | Material is stable under normal conditions.  |
| <b>Possibility of hazardous reactions:</b> | Hazardous polymerization does not occur.   |
| <b>Conditions to avoid:</b>                | Heat, sparks, flames. Freezing. Contact with incompatible materials.   |
| <b>Incompatible Materials:</b>             | Strong oxidizing agents. Metals. Chlorinated compounds. Steel. Aldehydes. Amines. Alcohols. Carbonates. Esters. Caustics. Phenols. Ketones. Epoxides. Halogens. Organic peroxides/hydroperoxides. Sulfur oxides. Cyanides. Fluorine. Nitromethane. Nitric acid. Acids. Sodium hydroxide. Peroxides. Powdered metals. |
| <b>Hazardous Decomposition Products:</b>   | Fire or excessive heat may produce hazardous decomposition products. oxides of phosphorus Nitrogen Oxides Oxides of Carbon.  |

## 11. Toxicological information

### Information on likely routes of exposure

|                      |                            |
|----------------------|----------------------------|
| <b>Inhalation:</b>   | May be harmful if inhaled. |
| <b>Skin Contact:</b> | Causes severe skin burns.  |
| <b>Eye contact:</b>  | Causes serious eye damage. |
| <b>Ingestion:</b>    | Harmful if swallowed.      |

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

|                        |                        |
|------------------------|------------------------|
| <b>Oral Product:</b>   | ATEmix: 1.664,25 mg/kg |
| <b>Dermal Product:</b> | ATEmix: 2.213,72 mg/kg |

#### Inhalation

**Product:** No data available.

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** Causes severe skin burns.

**Serious Eye Damage/Eye Irritation**

**Product:** Causes serious eye damage.

**Respiratory or Skin Sensitization**

**Product:** Not a skin sensitizer.

**Carcinogenicity**

**Product:** This substance has no evidence of carcinogenic properties.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**ACGIH Carcinogen List:**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No mutagenic components identified

**In vivo**

**Product:** No mutagenic components identified

**Reproductive toxicity**

**Product:** No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** Not classified

**Other effects:** None known.

|                                   |
|-----------------------------------|
| <b>12. Ecological information</b> |
|-----------------------------------|

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**



**Fish**  
Product: No data available.

**Aquatic Invertebrates**  
Product: No data available.

**Chronic hazards to the aquatic environment:**

**Fish**  
Product: No data available.

**Aquatic Invertebrates**  
Product: No data available.

**Toxicity to Aquatic Plants**  
Product: No data available.

**Persistence and Degradability**

**Biodegradation**  
Product: There are no data on the degradability of this product.

**BOD/COD Ratio**  
Product: No data available.

**Bioaccumulative potential**

**Bioconcentration Factor (BCF)**  
Product: No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)**

Product: No data available.

**Mobility in soil:** No data available.

**Other adverse effects:** Large amounts of the product may affect the acidity (pH-factor) in water with possible risk of harmful effects to aquatic organisms.

**13. Disposal considerations**

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**TDG**

|                            |  |
|----------------------------|--|
| UN Number:                 | UN 1760  |
| UN Proper Shipping Name:   | CORROSIVE LIQUID, N.O.S.(NITRIC ACID, ACETIC ACID) |
| Transport Hazard Class(es) |  |
| Class:                     | 8  |
| Label(s):                  | 8  |
| Packing Group:             | II   |
| Marine Pollutant:          | No   |

Special precautions for user: Not determined.

**IMDG**

|                               |  |
|-------------------------------|--|
| UN Number:                    | UN 1760  |
| UN Proper Shipping Name:      | CORROSIVE LIQUID, N.O.S.(NITRIC ACID, ACETIC ACID) |
| Transport Hazard Class(es)    |  |
| Class:                        | 8  |
| Label(s):                     | 8  |
| EmS No.:                      | F-A, S-B   |
| Packing Group:                | II   |
| Marine Pollutant:             | No   |
| Special precautions for user: | Not determined.                                    |

**IATA**

|                               |  |
|-------------------------------|--|
| UN Number:                    | UN 1760  |
| UN Proper Shipping Name:      | Corrosive liquid, n.o.s.(NITRIC ACID, ACETIC ACID) |
| Transport Hazard Class(es):   |  |
| Class:                        | 8  |
| Label(s):                     | 8  |
| Packing Group:                | II   |
| Marine Pollutant:             | No   |
| Special precautions for user: | Not determined.                                    |
| Cargo aircraft only:          | Allowed.   |

**Transport in bulk according to Annex II of MARPOL and the IBC Code:** Not applicable

|                                   |
|-----------------------------------|
| <b>15. Regulatory information</b> |
|-----------------------------------|

**Canada Federal Regulations**

**List of Toxic Substances (CEPA, Schedule 1)**

Not Regulated

**Export Control List (CEPA 1999, Schedule 3)**

Not Regulated

**National Pollutant Release Inventory (NPRI)**

**Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements**

NPRI PT5 Not Regulated

**Canada. National Pollutant Release Inventory (NPRI) (Schedule 1, Parts 1-4)**

NPRI Nitric acid

**Greenhouse Gases**

Not Regulated

**Controlled Drugs and Substances Act**

|           |               |
|-----------|---------------|
| CA CDSI   | Not Regulated |
| CA CDSII  | Not Regulated |
| CA CDSIII | Not Regulated |
| CA CDSIV  | Not Regulated |
| CA CDSV   | Not Regulated |
| CA CDSVII | Not Regulated |

CA CDSVIII                      Not Regulated

**Precursor Control Regulations**  
Not Regulated

**International regulations**

**Montreal protocol**  
Not applicable

**Stockholm convention**  
Not applicable

**Rotterdam convention**  
Not applicable

**Kyoto protocol**  
Not applicable

**Inventory Status:**

|  |  |
|--|--|
| Australia AICS:                          | On or in compliance with the inventory |
| Canada DSL Inventory List:               | On or in compliance with the inventory |
| EINECS, ELINCS or NLP:                   | On or in compliance with the inventory |
| Japan (ENCS) List:                       | On or in compliance with the inventory |
| China Inv. Existing Chemical Substances: | On or in compliance with the inventory |
| Korea Existing Chemicals Inv. (KECI):    | On or in compliance with the inventory |
| Canada NDSL Inventory:                   | Not in compliance with the inventory.  |
| Philippines PICCS:                       | On or in compliance with the inventory |
| US TSCA Inventory:                       | On or in compliance with the inventory |
| New Zealand Inventory of Chemicals:      | On or in compliance with the inventory |
| Japan ISHL Listing:                      | Not in compliance with the inventory.  |
| Japan Pharmacopoeia Listing:             | Not in compliance with the inventory.  |

**16. Other information, including date of preparation or last revision**

**Revision Date:**                      22.05.2018

**Version #:**                              1.1

**Further Information:**                No data available.

**Disclaimer:**

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