## SECTION 1. IDENTIFICATION

Product name : STAPA IL HYDROLAN 1580 Aluminium Paste
Product code : 053082GD0

**Manufacturer or supplier's details**

Company name of supplier : ECKART America LLC
Address : 830 East Erie Street
Painesville OH 44077
Telephone : 866-458-7837
(440) 954-7600
Telefax : (440) 354-6224
e-mail address : info.eckart.america.oh@altana.com
Emergency telephone : **CHEMTREC**: 800-424-9300
**CHEMTREC**: 1-703-527-3387 (International)

**NCEC**:
(contract no. ECKART29003-NCEC)
US: +1 866 928 0789 (Toll free)
Canada: +1 800 579 7421 (Toll Free)
Mexico: +52 55 5004 8763

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the Substance/Mixture : Coloring agent
Coloring agents, pigments

Recommended restrictions on use : No data available

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Flammable solids : Category 1

Eye irritation : Category 2A

Specific target organ toxicity - single exposure : Category 3 (Central nervous system)

**GHS label elements**

Hazard pictograms :

Signal Word : Danger

Hazard Statements :
H228 Flammable solid.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary Statements :

**Prevention:**

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ ventilating/ lighting/ equipment. |
| P261 | Avoid breathing dust. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. |

**Response:**

| | |
|---|---|
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P370 + P378 | In case of fire: Use for extinction: Special powder for metal fires. |
| P370 + P378 | In case of fire: Use for extinction: Dry sand. |

**Storage:**

| | |
|---|---|
| P403 + P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |

**Disposal:**

| | |
|---|---|
| P501 | Dispose of contents/ container to an approved waste disposal plant. |

Hazardous ingredients which must be listed on the label:
2-Propanol
Solvent naphtha (petroleum), light arom.

**Other hazards**
None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name | CAS No./Unique ID | Concentration (% w/w) | Trade secret |
|---|---|---|---|
| aluminium | 7429-90-5* | >= 45 - <= 70 | TSC |
| propan-2-ol | 67-63-0* | >= 10 - <= 30 | TSC |
| ethanol | 64-17-5* | >= 5 - <= 10 | TSC |
| silicon dioxide | 7631-86-9* | >= 3 - <= 7 | TSC |
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9* | >= 1 - <= 5 | TSC |
| Solvent naphtha (petroleum), light arom. | 64742-95-6* | >= 0.5 - <= 1.5 | TSC |
| N-(3-(trimethoxysilyl)propyl)ethylenediamine | 1760-24-3* | >= 0.1 - <= 1 | TSC |

- * Indicates that the identifier is a CAS No.
- TSC- the actual concentration or concentration range is withheld as a trade secret

## SECTION 4. FIRST AID MEASURES

General advice : Take the victim into fresh air.
Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.

If inhaled : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.

| | | |
|---|---|---|
| In case of skin contact | : | Wash off immediately with soap and plenty of water.<br>If on skin, rinse well with water.<br>If on clothes, remove clothes. |
| In case of eye contact | : | Immediately flush eye(s) with plenty of water.<br>Remove contact lenses.<br>Keep eye wide open while rinsing. |
| If swallowed | : | Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician. |
| Most important symptoms and effects, both acute and delayed | : | Causes serious eye irritation.<br>May cause drowsiness or dizziness. |

## SECTION 5. FIRE-FIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Dry sand<br>Special powder against metal fire |
| Unsuitable extinguishing media | : | Carbon dioxide (CO2)<br>ABC powder<br>Water<br>Foam |
| Specific hazards during fire fighting | : | Contact with water liberates extremely flammable gas (hydrogen). |
| Further information | : | Standard procedure for chemical fires.<br>Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
| Special protective equipment for fire-fighters | : | Use personal protective equipment.<br><br>Wear self-contained breathing apparatus for firefighting if necessary. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

| | | |
|---|---|---|
| Personal precautions, protective equipment and emergency procedures | : | Evacuate personnel to safe areas.<br>Use personal protective equipment.<br>Use personal protective equipment.<br>Avoid dust formation.<br>Remove all sources of ignition. |
| General advice | : | The product should not be allowed to enter drains, water courses or the soil.<br>Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |

| | | |
|---|---|---|
| Environmental precautions | : | The product should not be allowed to enter drains, water courses or the soil.<br><br>Prevent product from entering drains.<br>Prevent further leakage or spillage if safe to do so.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |
| Methods and materials for containment and cleaning up | : | Use mechanical handling equipment.<br>Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).<br><br>Do not flush with water.<br>Keep in suitable, closed containers for disposal. |

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on protection against fire and explosion | : | Earthing of containers and apparatuses is essential.<br>Take measures to prevent the build up of electrostatic charge.<br>Use explosion-proof equipment.<br><br>Avoid dust formation.<br>Keep away from open flames, hot surfaces and sources of ignition. |
| Advice on safe handling | : | Keep away from heat and sources of ignition.<br>Avoid dust formation.<br>Ensure adequate ventilation.<br>Avoid formation of respirable particles.<br>Do not breathe vapors/dust.<br>Avoid exposure - obtain special instructions before use.<br>Avoid contact with skin and eyes.<br>For personal protection see section 8.<br>Smoking, eating and drinking should be prohibited in the application area.<br>Provide sufficient air exchange and/or exhaust in work rooms.<br>Dispose of rinse water in accordance with local and national regulations. |
| Conditions for safe storage | : | Store in original container.<br>Keep containers tightly closed in a cool, well-ventilated place.<br>Keep container closed when not in use.<br>Keep away from sources of ignition - No smoking.<br>No smoking.<br>Keep container tightly closed in a dry and well-ventilated place.<br>Electrical installations / working materials must comply with |

the technological safety standards.

Technical measures/Precautions : Protect from humidity and water.
Do not allow to dry.

Materials to avoid : Do not store together with oxidizing and self-igniting products.
Never allow product to get in contact with water during storage.
Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability : No decomposition if stored and applied as directed.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| Aluminum | 7429-90-5 | TWA (total dust) | 50 Million particles per cubic foot | OSHA Z-3 |
| | | TWA (Respirable) | 5 mg/m3 | NIOSH REL |
| | | TWA (total dust) | 15 mg/m3 | OSHA Z-3 |
| | | TWA (total) | 10 mg/m3 | NIOSH REL |
| | | TWA (respirable fraction) | 5 mg/m3 | OSHA Z-3 |
| | | TWA (respirable fraction) | 15 Million particles per cubic foot | OSHA Z-3 |
| | | TWA (Respirable particulate matter) | 1 mg/m3 | ACGIH |
| | | TWA | 5 mg/m3 (Aluminum) | NIOSH REL |
| | | TWA (Total) | 15 mg/m3 (Aluminum) | OSHA P0 |
| | | TWA (Respirable fraction) | 5 mg/m3 (Aluminum) | OSHA P0 |
| | | TWA (total dust) | 15 mg/m3 (Aluminum) | OSHA Z-1 |

| | | | | |
|---|---|---|---|---|
| | | TWA (respirable fraction) | 5 mg/m3 (Aluminum) | OSHA Z-1 |
| | | TWA (Total dust) | 15 mg/m3 (Aluminum) | OSHA P0 |
| | | TWA (respirable dust fraction) | 5 mg/m3 (Aluminum) | OSHA P0 |
| | | TWA (welding fumes) | 5 mg/m3 (Aluminum) | NIOSH REL |
| | | TWA (pyro powders) | 5 mg/m3 (Aluminum) | NIOSH REL |
| | | TWA (Respirable particulate matter) | 1 mg/m3 (Aluminum) | ACGIH |
| | | TWA (Fumes) | 5 mg/m3 | OSHA P0 |
| | | TWA (powder) | 5 mg/m3 (Aluminum) | OSHA P0 |
| 2-Propanol | 67-63-0 | TWA | 200 ppm | ACGIH |
| | | STEL | 400 ppm | ACGIH |
| | | TWA | 400 ppm 980 mg/m3 | NIOSH REL |
| | | ST | 500 ppm 1,225 mg/m3 | NIOSH REL |
| | | TWA | 400 ppm 980 mg/m3 | OSHA Z-1 |
| | | TWA | 400 ppm 980 mg/m3 | OSHA P0 |
| | | STEL | 500 ppm 1,225 mg/m3 | OSHA P0 |
| Ethanol | 64-17-5 | TWA | 1,000 ppm | ACGIH |
| | | TWA | 1,000 ppm 1,900 mg/m3 | NIOSH REL |
| | | TWA | 1,000 ppm 1,900 mg/m3 | OSHA Z-1 |
| | | TWA | 1,000 ppm 1,900 mg/m3 | OSHA P0 |
| | | STEL | 1,000 ppm | ACGIH |
| Silica | 7631-86-9 | TWA (Dust) | 20 Million particles per cubic foot | OSHA Z-3 |

| | | | | |
|---|---|---|---|---|
| | | | (Silica) | |
| | | TWA (Dust) | 80 mg/m3 / %SiO2 (Silica) | OSHA Z-3 |
| | | TWA | 6 mg/m3 (Silica) | NIOSH REL |
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9 | TWA | 500 ppm 2,000 mg/m3 | OSHA Z-1 |
| | | TWA | 400 ppm 1,600 mg/m3 | OSHA P0 |
| Solvent naphtha (petroleum), light arom. | 64742-95-6 | TWA | 500 ppm 2,000 mg/m3 | OSHA Z-1 |
| | | TWA | 200 mg/m3 (total hydrocarbon vapor) | ACGIH |
| | | TWA | 400 ppm 1,600 mg/m3 | OSHA P0 |

**Biological occupational exposure limits**

| Components | CAS-No. | Control parameters | Biological specimen | Sampling time | Permissible concentration | Basis |
|---|---|---|---|---|---|---|
| 2-Propanol | 67-63-0 | Acetone | Urine | End of shift at end of workweek | 40 mg/l | ACGIH BEI |

**Personal protective equipment**

Respiratory protection : Use suitable breathing protection if workplace concentration requires.
In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection

Material : Solvent-resistant gloves (butyl-rubber)

Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). The exact break through time can be obtained from the protective glove producer and this has to be observed. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local

conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Recommended preventive skin protection Skin should be washed after contact. The suitability for a specific workplace should be discussed with the producers of the protective gloves.

| | | |
|---|---|---|
| Eye protection | : | Wear face-shield and protective suit for abnormal processing problems. |
| Skin and body protection | : | Long sleeved clothing<br>Safety shoes<br>Choose body protection according to the amount and concentration of the dangerous substance at the work place. |
| Hygiene measures | : | When using do not eat or drink.<br>When using do not smoke.<br>Wash hands before breaks and at the end of workday. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Form | : | Pasty solid |
| Color | : | silver |
| Odor | : | solvent |
| Odor Threshold | : | No data available |
| pH | : | substance/mixture is non-soluble (in water) |
| Melting point/freezing point | : | No data available |
| Boiling point/boiling range | : | 82 - 83 °C |
| Flash point | : | 13 °C |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | The substance or mixture is a flammable solid with the category 1. |
| Auto-flammability | : | not auto-flammable |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative density | : | No data available |
| Density | : | 1.3 - 2.0 g/cm3 |
| Solubility(ies) | | |
| Water solubility | : | insoluble |
| Partition coefficient: n-octanol/water | : | No data available |
| Autoignition temperature | : | 425 °C |

| | | |
|---|---|---|
| Decomposition temperature | : | No data available |
| Viscosity | : | No data available |
| Explosive properties | : | Not explosive Vapors may form explosive mixture with air. |
| Total Volatile organic compounds (VOC) content | : | 30.00 - 40.00 % |
| Viscosity, kinematic | : | No data available |
| Relative vapor density | : | No data available |

**Particle characteristics**

| | | |
|---|---|---|
| Particle Size Distribution | : | 1 - 15 µm |

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | No decomposition if stored and applied as directed. |
| Chemical stability | : | No decomposition if stored and applied as directed. |
| Possibility of hazardous reactions | : | Reacts with alkalis, acids, halogenes and oxidizing agents.<br>Contact with acids and alkalis may release hydrogen.<br>Mixture reacts slowly with water resulting in evolution of hydrogen.<br>Vapors may form explosive mixture with air.<br>Stable under recommended storage conditions. |
| Conditions to avoid | : | Do not allow to dry.<br>Heat, flames and sparks. |
| Incompatible materials | : | Acids<br>Bases<br>Oxidizing agents<br>Highly halogenated compounds |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

Not classified due to lack of data.

**Components:**

**2-Propanol:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 2,000 mg/kg |
| Acute dermal toxicity | : | LD50 (Rabbit): > 2,000 mg/kg |

**Ethanol:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, male and female): 10,470 mg/kg<br>Method: OECD Test Guideline 401 |
| Acute inhalation toxicity | : | LC50 (Rat, male and female): 124.7 mg/l<br>Exposure time: 4 h<br>Test atmosphere: vapor<br>Method: OECD Test Guideline 403 |

**Silica:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg<br>(Mouse): 15,000 mg/kg |
| Acute inhalation toxicity | : | (Rat): 0.139 mg/l<br>Exposure time: 4 h |
| Acute dermal toxicity | : | LD50 (Rabbit): > 5,000 mg/kg |

**Naphtha (petroleum), hydrotreated heavy:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): Test atmosphere: vapor<br>Remarks: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration. |
| Acute dermal toxicity | : | LD50 (Rabbit): > 5,000 mg/kg |

**Solvent naphtha (petroleum), light arom.:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): 3,492 mg/kg |
| Acute dermal toxicity | : | LD50 (Rabbit): > 3,160 mg/kg |

**Skin corrosion/irritation**

Not classified due to lack of data.

**Components:**

**Ethanol:**

Result: No skin irritation
Remarks: Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Components:**

**2-Propanol:**

Result: Eye irritation

**Ethanol:**

Result: Eye irritation
Remarks: Based on available data, the classification criteria are not met.

**1,2-Ethanediamine, N1-[3-(trimethoxysilyl)propyl]-:**

Result: Corrosive

**Respiratory or skin sensitization**

**Skin sensitization**

Based on available data, the classification criteria are not met.

**Respiratory sensitization**

Not classified due to lack of data.

**Components:**

**1,2-Ethanediamine, N1-[3-(trimethoxysilyl)propyl]-:**

Result: The product is a skin sensitizer, sub-category 1B.

**Germ cell mutagenicity**

Not classified due to lack of data.

**Components:**

**Naphtha (petroleum), hydrotreated heavy:**

Germ cell mutagenicity - Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

**Solvent naphtha (petroleum), light arom.:**

Germ cell mutagenicity - : Classified based on benzene content < 0.1% (Regulation (EC)

Assessment 1272/2008, Annex VI, Part 3, Note P)

**Carcinogenicity**

Not classified due to lack of data.

**Components:**

**Naphtha (petroleum), hydrotreated heavy:**

Carcinogenicity - Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

**Solvent naphtha (petroleum), light arom.:**

Carcinogenicity - Assessment : Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)

| | | |
|---|---|---|
| **IARC** | Group 1: Carcinogenic to humans | |
| | Ethanol | 64-17-5 |
| **OSHA** | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. | |
| **NTP** | No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. | |

**Reproductive toxicity**

Not classified due to lack of data.

**STOT-single exposure**

May cause drowsiness or dizziness.

**Components:**

**2-Propanol:**

Assessment: May cause drowsiness or dizziness.

**Solvent naphtha (petroleum), light arom.:**

Assessment: May cause respiratory irritation., May cause drowsiness or dizziness.

**1,2-Ethanediamine, N1-[3-(trimethoxysilyl)propyl]-:**

Assessment: May cause respiratory irritation.

**STOT-repeated exposure**
Not classified due to lack of data.

**Aspiration toxicity**
Not classified due to lack of data.

**Components:**

**Naphtha (petroleum), hydrotreated heavy:**
May be fatal if swallowed and enters airways.

**Solvent naphtha (petroleum), light arom.:**
May be fatal if swallowed and enters airways.

**Further information**

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**Silica:**

| | | |
|---|---|---|
| Toxicity to daphnia and other aquatic invertebrates | : | (Daphnia): 7,600 mg/l |
| Toxicity to algae | : | (Chlorella pyrenoidosa): 440 mg/l |

**Solvent naphtha (petroleum), light arom.:**

**Ecotoxicology Assessment**

| | | |
|---|---|---|
| Chronic aquatic toxicity | : | Toxic to aquatic life with long lasting effects. |

**Persistence and degradability**
No data available

**Bioaccumulative potential**
No data available

**Other adverse effects**
No data available

**Components:**

**Silica:**

| | | |
|---|---|---|
| Additional ecological information | : | No data available |

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

| | | |
|---|---|---|
| Waste from residues | : | Do not dispose of waste into sewer.<br>Do not contaminate ponds, waterways or ditches with chemical or used container.<br>Send to a licensed waste management company.<br>In accordance with local and national regulations. |
| Contaminated packaging | : | Empty remaining contents.<br>Dispose of as unused product.<br>Do not re-use empty containers.<br>Do not burn, or use a cutting torch on, the empty drum.<br>In accordance with local and national regulations. |

## SECTION 14. TRANSPORT INFORMATION

**Domestic regulation**

**49 CFR**

| | | |
|---|---|---|
| UN/ID/NA number | : | UN 1325 |
| Proper shipping name | : | Flammable solids, organic, n.o.s.<br>(Aluminum pigment paste) |
| Class | : | 4.1 |
| Packing group | : | II |
| Labels | : | FLAMMABLE SOLID |
| ERG Code | : | 133 |
| Marine pollutant | : | no |

**International Regulations**

**IATA-DGR**

| | | |
|---|---|---|
| UN/ID No. | : | UN 1325 |
| Proper shipping name | : | Flammable solid, organic, n.o.s.<br>(Aluminium pigment paste) |
| Class | : | 4.1 |
| Packing group | : | II |
| Labels | : | Flammable Solid |
| Packing instruction (cargo aircraft) | : | 448 |
| Packing instruction (passenger aircraft) | : | 445 |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 1325 |
| Proper shipping name | : | FLAMMABLE SOLID, ORGANIC, N.O.S.<br>(Aluminium pigment paste) |
| Class | : | 4.1 |
| Packing group | : | II |

| | | |
|---|---|---|
| Labels | : | 4.1 |
| EmS Code | : | F-G, S-G |
| Marine pollutant | : | no |
| Remarks | : | IMDG Code segregation group 15 - Powdered metals |

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

Not applicable for product as supplied.

## SECTION 15. REGULATORY INFORMATION

**EPCRA - Emergency Planning and Community Right-to-Know**

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) |
|---|---|---|
| Methanol | 67-56-1 | 5000 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| Aluminum | 7429-90-5 | >= 60 - < 70 % |
| 2-Propanol | 67-63-0 | >= 15 - < 30 % |

**Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (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).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

| | | |
|---|---|---|
| 2-Propanol | 67-63-0 | >= 20 - < 30 % |

| | | |
|---|---|---|
| Ethanol | 64-17-5 | >= 5 - < 10 % |

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307
This product does not contain any priority pollutants related to the U.S. Clean Water Act

**US State Regulations**

**Massachusetts Right To Know**

| | |
|---|---|
| Aluminum | 7429-90-5 |
| 2-Propanol | 67-63-0 |
| Ethanol | 64-17-5 |
| Silica | 7631-86-9 |

**Pennsylvania Right To Know**

| | |
|---|---|
| Aluminum | 7429-90-5 |
| 2-Propanol | 67-63-0 |
| Ethanol | 64-17-5 |
| Silica | 7631-86-9 |
| Naphtha (petroleum), hydrotreated heavy | 64742-48-9 |
| Solvent naphtha (petroleum), light arom. | 64742-95-6 |

**California Prop. 65**

WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

WARNING: This product can expose you to chemicals including Ethanol, which is/are known to the State of California to cause cancer, and Ethanol, Methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

**California List of Hazardous Substances**

| | |
|---|---|
| Aluminum | 7429-90-5 |

| | |
|---|---|
| 2-Propanol | 67-63-0 |
| Ethanol | 64-17-5 |
| Silica | 7631-86-9 |

**California Permissible Exposure Limits for Chemical Contaminants**

| | |
|---|---|
| Aluminum | 7429-90-5 |
| 2-Propanol | 67-63-0 |
| Ethanol | 64-17-5 |
| Silica | 7631-86-9 |

**The ingredients of this product are reported in the following inventories:**

| | | |
|---|---|---|
| CA. DSL | : | All components of this product are on the Canadian DSL |
| US TSCA | : | All chemical substances in this product are either listed as active on the TSCA Inventory or are in compliance with a TSCA Inventory exemption. |

**TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

## SECTION 16. OTHER INFORMATION

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| ACGIH BEI | : | ACGIH - Biological Exposure Indices (BEI) |
| NIOSH REL | : | USA. NIOSH Recommended Exposure Limits |
| OSHA P0 | : | USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| OSHA Z-3 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts |

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| ACGIH / TWA | : | 8-hour, time-weighted average |
| ACGIH / STEL | : | Short-term exposure limit |
| NIOSH REL / TWA | : | Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / ST | : | STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday |
| OSHA P0 / TWA | : | 8-hour time weighted average |
| OSHA P0 / STEL | : | Short-term exposure limit |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |
| OSHA Z-3 / TWA | : | 8-hour time weighted average |

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardization; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organization for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); LSPN - List of Hazardous Notified Substances (Chile); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorization and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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The information provided in this Material 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.

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