1. Identification

Product identifier  HYDRO-PAC®
Other means of identification  None.
Recommended use  Not available.
Recommended restrictions  None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer  CETCO, an MTI Company
Address  2870 Forbs Avenue
Hoffman Estates, IL 60192
United States
Telephone  General Information  800 527-9948
Website  http://www.cetco.com/
E-mail  safetydata@mineraltech.com
Emergency phone number  Emergency  1.866.519.4752/1 760 476 3962

2. Hazard identification

Physical hazards  Not classified.

Health hazards  
- Skin corrosion/irritation  Category 2
- Serious eye damage/eye irritation  Category 2

Environmental hazards  None known.

Label elements

Hazard symbol  None.
Signal word  Warning
Hazard statement  May form combustible dust concentrations in air.

Precautionary statement

Response  If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.
Storage  Store away from incompatible materials.
Disposal  Dispose of waste and residues in accordance with local authority requirements.

Other hazards  None known.

3. Composition/information on ingredients

Mixtures

The components are not hazardous or are below required disclosure limits.

DSD: Directive 67/548/EEC.
#: This substance has been assigned Community workplace exposure limit(s).
M: M-factor
PBT: persistent, bioaccumulative and toxic substance.
vPvB: very persistent and very bioaccumulative substance.
*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments  Not applicable to consumer products. Occupational Exposure Limits for constituents are listed in Section 8.
4. First-aid measures

Inhalation
If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop. Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact
Get medical attention if irritation develops or persists. Get medical attention if irritation develops and persists. Wash affected area with mild soap and water.

Eye contact
Do not rub eyes. Immediately flush eyes with plenty of water for at least 20 minutes. Rinse with water. Get medical attention if irritation develops and persists.

Ingestion
No special measures required

Most important symptoms/effects, acute and delayed
Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed
Provide general supportive measures and treat symptomatically.

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

5. Fire-fighting measures

Suitable extinguishing media
Water fog. Foam. Dry chemical powder. Dry chemical, CO2, water spray or regular foam. Apply extinguishing media carefully to avoid creating airborne dust.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire. Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical
Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Structural firefighters protective clothing will only provide limited protection. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do it without risk. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Material can be slippery when wet.

Specific methods
Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Self-contained breathing apparatus and full protective clothing must be worn in case of fire. In the event of fire and/or explosion do not breathe fumes.

General fire hazards
May form combustible dust concentrations in air. No unusual fire or explosion hazards noted. This product is combustible at high temperatures.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Use only non-sparking tools. Keep out of low areas. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. Material can be slippery when wet.
Methods and materials for containment and cleaning up

Take precautionary measures against static discharge. Use only non-sparking tools. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Stop leak if you can do so without risk. Sweep up or gather material and place in appropriate container for disposal. Collect dust using a vacuum cleaner equipped with HEPA filter.

Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Avoid the generation of dusts during clean-up. Following product recovery, flush area with water.

Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Do not flush into surface water or sanitary sewer system.

7. Handling and storage

Precautions for safe handling

Prevent dust accumulation to minimize explosion hazard. Keep formation of airborne dusts to a minimum. Minimize dust generation and accumulation. Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Practice good housekeeping. Material can be slippery when wet. Refer to NFPA Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries."

Conditions for safe storage, including any incompatibilities

The pressure in sealed containers can increase under the influence of heat. Keep away from heat and sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Keep containers tightly closed in a dry, cool and well-ventilated place. Guard against dust accumulation of this material. Keep out of the reach of children. Use care in handling/storage.

8. Exposure controls/personal protection

Occupational exposure limits

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE DUSTS</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable particles.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Total particulate.</td>
</tr>
</tbody>
</table>

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

<table>
<thead>
<tr>
<th>Constituents</th>
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<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE DUSTS</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE DUSTS</td>
<td>TWA</td>
<td>3 mg/m³</td>
<td>Respirable fraction.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 mg/m³</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

<table>
<thead>
<tr>
<th>Constituents</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>INERT OR NUISANCE DUSTS</td>
<td>TWA</td>
<td>10 mg/m³</td>
<td>Total dust.</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

No exposure standards allocated.
Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn. 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. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection
Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Not normally needed.

Other
Wear suitable protective clothing. Normal work clothing (long sleeved shirts and long pants) is recommended.

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. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using, do not eat, drink or smoke. When using do not smoke. Wash hands before breaks and immediately after handling the product. 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. Use good industrial hygiene practices in handling this material.

9. Physical and chemical properties

Appearance
Powder.
Physical state
Solid.
Form
Powder.
Color
Off-white.
Odor
Flour-like
Odor threshold
Not available.
pH
5.5 - 8.5
Melting point/freezing point
Not available.
Initial boiling point and boiling range
Not available.
Flash point
> 199.4 °F (> 93.0 °C)
Evaporation rate
Not available.
Flammability (solid, gas)
Not available. Flammable solid.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Not available.
Explosive limit - lower (%)
Not available.
Explosive limit - upper (%)
Not available.
Vapor pressure
Not available.
Vapor density
Not available.
Relative density
Not available.
Solubility(ies)
Solubility (water)
Not available.
Partition coefficient (n-octanol/water)
Not available.
Auto-ignition temperature
Not available.
Decomposition temperature
Not available.
Viscosity
Not available.

Other information

Explosive properties
Not explosive.

Flammability class
Combustible IIIA estimated

Flash point class
Combustible IIIA

Oxidizing properties
Not oxidizing.

Percent volatile
0 % estimated

10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Stable at normal conditions.

Possibility of hazardous reactions
Will not occur.

Conditions to avoid
Keep away from heat, sparks and open flame. Heat, flames and sparks. Avoid temperatures exceeding the flash point. Minimize dust generation and accumulation. Contact with incompatible materials. Dust cloud ignition temperature 590°C.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Dust may irritate respiratory system.

Skin contact
Dust or powder may irritate the skin.

Eye contact
Dust may irritate the eyes.

Ingestion
May cause discomfort if swallowed. Expected to be a low ingestion hazard. However, ingestion is not likely to be a primary route of occupational exposure.

Symptoms related to the physical, chemical and toxicological characteristics
Dusts may irritate the respiratory tract, skin and eyes. Exposure may cause temporary irritation, redness, or discomfort.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>HYDRO-PAC®</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>100000 mg/kg</td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>100000 mg/l/4h</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation. Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation
Direct contact with eyes may cause temporary irritation. Due to partial or complete lack of data the classification is not possible. None known.

Respiratory or skin sensitization

Respiratory sensitization
Not a respiratory sensitizer. Due to partial or complete lack of data the classification is not possible.

Skin sensitization
None known. This product is not expected to cause skin sensitization. Due to partial or complete lack of data the classification is not possible.

Germ cell mutagenicity
No data available for this product. Due to partial or complete lack of data the classification is not possible.

Carcinogenicity
Due to partial or complete lack of data the classification is not possible. Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA.

Reproductive toxicity
Not classified. This product is not expected to cause reproductive or developmental effects. Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure
Due to partial or complete lack of data the classification is not possible. Not classified.

Specific target organ toxicity - repeated exposure
Not classified. Due to partial or complete lack of data the classification is not possible.

Aspiration hazard
Not an aspiration hazard. Due to partial or complete lack of data the classification is not possible.

Chronic effects
Not expected to be hazardous by WHMIS criteria.

Further information
This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity
No data is available on the product itself. This product is not expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Contract with a disposal operator licensed by the Law on Disposal and Cleaning. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations. When your own wastewater treatment plant is not available, collect entire waste and then charge to a licensed industrial waste management professional with manifests for industrial waste.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable.

15. Regulatory information

Canadian regulations
This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

Controlled Drugs and Substances Act
Not regulated.

Export Control List (CEPA 1999, Schedule 3)
Not listed.

Greenhouse Gases
Not listed.

Precursor Control Regulations
Not regulated.

Stockholm Convention
Not applicable.
Rotterdam Convention
Not applicable.
Kyoto protocol
Not applicable.
Montreal Protocol
Not applicable.
Basel Convention
Not applicable.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>Yes</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>Yes</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Chemical Substance Inventory (TCSI)</td>
<td>Yes</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date                     13-August-2018
Revision date                  13-August-2018
Version #                      13
Further information            This safety datasheet only contains information relating to safety and does not replace any product information or product specification. HMIS® is a registered trade and service mark of the NPCA.
Disclaimer

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 manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use.

Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier. 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. This safety data sheet was prepared in accordance with JIS Z 7253:2012. Additional information is given in the Material Safety Data Sheet. CETCO, an MTI Company cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

Revision Information

Product and Company Identification: Alternate Trade Names
Composition / Information on Ingredients: Ingredients
Physical & Chemical Properties: Multiple Properties
GHS: Classification