SAFETY DATA SHEET

Product Name: PURTABS (Tablet Concentrate)
Revision date: 28/08/2015
Supersedes: - 
Revision: 0

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance/preparation
Product Name : PURTABS
Synonyms :

1.2 Use of the substance/preparation
Effervescent NaDCC Tablets are used for drinking water disinfection and surface disinfection.

1.3 Company/undertaking identification
Distributor : EarthSafe Chemical Alternatives, 145 Wood Road, Braintree, MA 02184
             Tel: 866-666-2305
             Fax: 781-843-2182
             e-mail: info@earthsafeca.com

1.4 US Emergency Contact Telephone Number:
For Emergency Medical Treatment Information 1-800-222-1222 may be contacted (National Poison Centre)

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture according to the Globally Harmonised System of Classification and Labelling of Chemicals, Third Revised Edition, 2009 (GHS):
Eye Irritant: Category 2 – causes serious eye irritation
Target Organ Toxicity (single exposure): Category 3 – May cause respiratory tract irritation
Hazardous to Aquatic Environment - Acute Hazard: Category 1 - Very toxic to aquatic life
Hazardous to Aquatic Environment - Chronic Hazard: Category 1 - Very toxic to aquatic life with long lasting effects

Additional Information:
EUH031 – Contact with acids liberates toxic gases

2.2 Label Elements
Labelling in accordance with Globally Harmonised System of Classification and Labelling of Chemicals, Third Revised Edition, 2009 (GHS):

Signal Word: WARNING

Health Hazard Statement(s)
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Physical Hazard Statement(s)
Environmental Hazard Statement(s)
H410 - Very toxic to aquatic life with long lasting effects
Supplemental Hazard Statement
EUH031- Contact with acids liberates toxic gas

Precautionary Statement(s) - Prevention
P261 - Avoid breathing dust/fumes
P271 – Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 – Wear protective gloves/eye protection

Precautionary Statement(s) - Response
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 attention
P312 - Call a POISON CENTER or doctor if you feel unwell
P391 - Collect spillage

Precautionary Statement(s) - Storage
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
P405 – Store locked up

Precautionary Statement(s) - Disposal
P501 - Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations

2.3 Other Hazard Information
Skin: Direct contact with wet material or moist skin may cause severe irritation, pain, and possibly burns

3. COMPOSITION/INFORMATION ON INGREDIENTS.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Weight in Product (% w/w)</th>
<th>CAS No:</th>
<th>GHS Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troclosene Sodium / 1,3,5-Triazine - 2,4,6</td>
<td>30-65%</td>
<td>2893-78-9</td>
<td>Danger Oxidizing Solid - Category 2; Eyes irritant Cat.2;</td>
</tr>
<tr>
<td>(1H, 3H, 5H) - trione, 1, 3 - dichloro-,</td>
<td></td>
<td></td>
<td>Harmful if swallowed Cat.4; May cause respiratory tract</td>
</tr>
<tr>
<td>sodium salt</td>
<td></td>
<td></td>
<td>irritation Cat.3; Very toxic to aquatic life Cat.1;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H302; H319; H335; H272; H410; EUH031</td>
</tr>
<tr>
<td>Adipic Acid</td>
<td>10-35%</td>
<td>124-04-9</td>
<td>Warning Eyes irritant Cat.2; H 319</td>
</tr>
<tr>
<td>Sodium Carbonate</td>
<td>2-12%</td>
<td>497-19-8</td>
<td>Warning Eyes irritant Cat.2; H 319</td>
</tr>
</tbody>
</table>

Important Note: the classification descriptions given in this section relate to the components in their pure form and do not correspond to the classification of this preparation (see section 16 for full description of R phrases)

The classification of this tablet as supplied is given in Section 15.

4. FIRST AID MEASURES.

Inhalation: Short Term Exposure: This material contained in this tablet in solid form is not expected to produce respiratory effects. Particles of respirable size are generally not encountered. The respirable fraction for the tablet active ingredient is typically less than 0.1% by weight for the granular and extra granular grades. If it is ground or otherwise in a powdered form, effects similar
to a corrosive substance may occur. May cause severe irritation of the respiratory tract with
coughing, choking, pain and possibly burns of the mucous membranes. If significant or prolonged
exposure occurs, pulmonary oedema may develop, either immediately or more often within a
period of 5-72 hours. The symptoms may include tightness in the chest, dyspnea, frothy sputum,
cyanosis, and dizziness. Physical findings may include moist rales, low blood pressure and high
pulse pressure. Severe cases may be fatal.

First Aid: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give
artificial respiration, preferably by mouth to mouth, if possible. Call a poison control center or
doctor for further treatment advice.

Skin contact: Short Term Exposure: Direct contact with wet material or moist skin may cause severe irritation,
pain, and possibly burns. Dry material is less irritating than wet material. This material is not a
skin sensitiser based on studies with guinea pigs.

First Aid: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20
minutes. Call a poison control center or doctor for treatment advice.

Eye contact: Short Term Exposure: This material is irritating to the eye. Direct contact may cause severe
irritation, pain and burns, possibly severe, and permanent damage including blindness. The degree
of injury depends on the concentration and duration of contact.

First Aid: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove
contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control
center or doctor for treatment advice.

Ingestion: Short Term Exposure: Not a likely route of exposure. Harmful if swallowed. Ingestion may cause
immediate pain and severe burns of the mucous membranes. There may be discoloration of the
tissues. Swallowing and speech may be difficult at first and then almost impossible. The effects
on the oesophagus and gastrointestinal tract may range from irritation to severe corrosion.

First Aid: Call a poison control center or doctor immediately for treatment advice. Have person
sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison
control center or doctor. Do not give anything by mouth to an unconscious person.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE-FIGHTING MEASURES.

Fire Hazard: Negligible fire hazard. If heated by outside source to temperatures above 240ºC (464ºF), this product
will undergo decomposition with the evolution of noxious gases but no visible flame. Wet material may generate
nitrogen trichloride, an explosion hazard.

Extinguishing Media
Do not attempt to extinguish the fire without a self-contained breathing apparatus. Do not let the fire burn. Flood
with copious amounts of water. Do not use dry chemicals, carbon dioxide or halogenated extinguishers since there
is potential for a violent reaction.

Fire-Fighting Techniques/Comments
Fire-fighters should wear full protective clothing and a self contained breathing apparatus. Using a 10% solution of
sodium carbonate, thoroughly decontaminate fire-fighting equipment including all fire fighting wearing apparel
after the incident

Hazardous Combustion Products
Thermal decomposition or combustion products: chlorine, nitrogen, nitrogen trichloride, cyanogens chloride, oxides
of carbon, phosgene

6. ACCIDENTAL RELEASE MEASURES.

Personal Precautions
Avoid contact with skin and eyes. Wear chemical safety goggles and chemical resistant gloves.
Handle product in a well-ventilated area.

Environmental Precautions
Do not release into the environment.
Prevent flow of material into water source and begin monitoring available chlorine and pH immediately.
Notify all downstream users of possible contamination.

Methods for Cleaning Up
Containing spilled material. Any spillage should be cleaned up as soon as possible. Do not add water to spilled material. Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean, dry containers for disposal. Do not close drums containing wet or damp material. Do not transport wet or damp material.

7. HANDLING AND STORAGE.

7.1 Handling
Do not get in eyes, on skin or on clothing.
Avoid breathing airborne particulates; wear respiratory protection when exposure is possible
Wear goggles or face shield and rubber gloves when handling.
Wash hands thoroughly with soap and water after handling.
Wash contaminated clothing before use.
Vapour space in a closed container may contain a slight amount of chlorine gas and compounds from decomposition of the product.

7.2 Storage
Store in original container and in a cool dry area where temperatures do not exceed 25°C. Keep container tightly closed and store away from incompatible materials (refer to section 10 for list of incompatible materials).
Contact with acid liberates toxic gases.
Do not allow water to get into the container. Keep out of reach of children.
7.3 Handling Instructions for Specific Uses
Mix only with water. Use clean dry utensils. Do not mix this product with remnants of any other products. Such uses may cause a violent reaction leading to fire or explosion. Contamination with moisture, organic matter or other chemicals may start a chemical reaction with generation of heat, liberation of hazardous gases, and possible generation of fire and explosion. Vapour space in a closed container may contain a slight amount of chlorine gas and other chlorine containing compounds from decomposition of the product. Exposure to chlorine gas may cause burning of the eyes, burning of the nose and mouth and irritation of the linings of the respiratory tract with coughing, a choking sensation, substernal pain, vomiting, nausea, headache, dizziness and fainting.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

The information below relates to Sodium Dichloroisocyanurate in its pure form. This preparation contains 1,3,5 - Triazine - 2,4,6 (1H, 3H, 5H) - trione, 1, 3 - dichloro-, sodium salt (sodium dichloroisocyanuric acid).

Weight of Sodium Dichloroisocyanurate acid in this preparation product (% w/w): 30-65% 

Exposure Limits:

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH-TLV Data</th>
<th>OSHA (PEL) Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric Acid, Sodium Salt</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>2893-78-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adipic Acid</td>
<td>5mg/m³</td>
<td>Not determined</td>
</tr>
<tr>
<td>124-04-09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Carbonate</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
<tr>
<td>497-19-8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Advice: Chlorine and chlorine compounds may be found in slight amounts in the head space of containers of Products.

Risk management measures (RMM):

RMM: Health
• The use of a half-face respirator with chlorine cartridges (EN140) is required during opening of drums and filling of containers.
• An IOEL of 1.5 mg/m³ chlorine is applicable.
• The substance is corrosive so risk mitigation measures (wearing PPE consisting of gloves (nitrile), coverall and safety glasses) while handling the raw material and where exposure may be possible, would apply.
• Local exhaust ventilation should be used where opening of drums and filling of containers occurs.

RMM: Environment
• Engineering controls should be used to eliminate emissions of dust and chlorinated fumes as appropriate. All gas emissions should be filtered for dust and treated with sodium hydroxide to remove chlorine and other volatile chlorinated species. Dry solid residues from air filtration systems are collected and either recycled or disposed of. The waste dust from formulation or tableting is sent to an external waste treatment site for disposal.

Engineering controls:
Use only in well-ventilated areas. Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

Personal Protective Equipment:
Eye Protection: Wear chemical safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.
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Skin and Body Protection: Wear protective clothing to minimize skin contact. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®. Contaminated clothing should be removed and laundered before reuse.

Hand Protection: Wear appropriate chemical resistant gloves.

Protective Material Types: Butyl rubber, Natural rubber, Neoprene, Nitrile, Polyvinyl chloride (PVC), Tyvek®

Respiratory Protection: An approved respirator with EN140 (chlorine) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. The added protection of a full face piece respirator is required when visible dusty conditions are encountered and eye irritation may occur. A respiratory protection program that meets applicable regulatory requirements must be followed whenever workplace conditions warrant use of a respirator.


<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>White/off white tablet</td>
</tr>
<tr>
<td>Odour</td>
<td>Slight chlorine odour.</td>
</tr>
<tr>
<td>pH</td>
<td>5.5 – 6.5</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Not applicable (solid)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable (solid)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Non flammable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable (not volatile)</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not applicable (not volatile)</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Completely Soluble in Water</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Log Kow = 0</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable (solid)</td>
</tr>
<tr>
<td>Thermal Decomposition Temp</td>
<td>225 - 250°C</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY.

Stability Data: Stable

Incompatibility (Materials to avoid):
Strong acids and/or alkalines. Reducing agents. Combustible material. The active ingredient in this preparation is a strong oxidising agent. The preparation of concentrated solutions or slurries is not recommended. Avoid contact with water on concentrated material in the container. Also avoid contact with easily oxidisable organic material: ammonia, urea or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite and alkalis.
Do not get water inside packaging.

Hazardous Decomposition Products: Chlorine, Nitrogen trichloride, Cyanogen chloride, Oxides of carbon, Phosgene.
Polymerisation - Avoid: Hazardous Polymerisation will not occur

11. TOXICOLOGICAL INFORMATION.

Toxicity and Hazard Report was undertaken by the Russian Disinfection Research Institute on the Sodium Dichloroisocyanurate in an effervescent base (Reference Directive 67/548/EEC Annex VI, Point 2: Classification on the basis of physiochemical properties (adequate information to demonstrate in practice…). Based on this report an EU Competent Authority determined that product does not bear the symbol Harmful, with "Harmful if Swallowed". The Authority determined that the Irritant symbol (X) to be appropriate with the R36/37 phrases.

Skin and Eye Contact: Irritating to Eyes. (Note: the in-use solution is not irritating to eyes)
Not classified as Irritating to the skin. Not a Potential Sensitiser
Ingestion: The Acute Oral LD₅₀ (rat) > 2000mg/kg for the product supplied
Inhalation: Sodium Dichloroisocyanurate is irritating to the respiratory system

The information below relates to Sodium Dichloroisocyanurate in its pure form.
This preparation contains 1,3,5 - Triazine - 2,4,6 (1H, 3H, 5H) - trione, 1, 3 - dichloro-, sodium salt (sodium dichloroisocyanuric acid) at levels that may produce a biological effect.
This ingredient is moderately toxic by ingestion. It is irritating to the eyes and respiratory system. No specific toxicological information is available for this preparation.
Weight of Sodium Dichloroisocyanurate acid in this preparation product (% w/w): 30-65%

<table>
<thead>
<tr>
<th>Toxicological Effect</th>
<th>Exposure Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Skin Irritation</td>
<td>Moderate Irritation (rabbit, 24hr)</td>
</tr>
<tr>
<td>Primary Eye Irritation</td>
<td>Severe Irritation, Corrosive (rabbit, 24 hr)</td>
</tr>
<tr>
<td>Acute Toxicity - Oral</td>
<td>1823mg/kg oral-rat LD₅₀</td>
</tr>
<tr>
<td>Acute Toxicity - Inhalation</td>
<td>0.27-1.17 mg/L/4 hour(s) inhalation-rat LC₅₀</td>
</tr>
<tr>
<td>Acute Toxicity - Dermal</td>
<td>&gt;5000 mg/kg skin-rabbit LD₅₀</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>Not mutagenic in 5 salmonella strains and 1 E. coli strain.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Not classified by NTP, IARC or OSHA</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>There are no known or recorded effects on reproductive function or foetal development</td>
</tr>
<tr>
<td>Sensitisation - Skin</td>
<td>No Reports Found</td>
</tr>
<tr>
<td>Sensitisation - Respiratory</td>
<td>No Reports Found</td>
</tr>
<tr>
<td>Repeated-Dose Toxicity</td>
<td>No Reports Found</td>
</tr>
</tbody>
</table>

Repeated Exposure (Chronic)
Based on animal studies, exposure to concentrations of monosodium cyanurate at the solubility limit may cause cardiovascular, kidney and urinary bladder effects.
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MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: eye disorders, respiratory disorders, skin disorders and allergies
TARGET ORGANS: cardiovascular system, kidneys, bladder.
PBT: The substances contained in this preparation are not identified as PBT substances.

12. ECOLOGICAL INFORMATION.

The information below relates to Sodium Dichloroisocyanurate in its pure form.
This preparation contains 1,3,5 - Triazine - 2,4,6 (1H, 3H, 5H) - trione, 1, 3 - dichloro-, sodium salt (sodium dichloroisocyanuric acid) at levels that may produce a biological effect.

Ecotoxicity: This preparation is likely to be highly toxic to aquatic life. No specific ecotoxicological information is available for this preparation.

Weight of Sodium Dichloroisocyanurate acid in this preparation product (% w/w): 30-65%

<table>
<thead>
<tr>
<th>Fish Toxicity</th>
<th>Sodium Dichloroisocyanurate acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bluegill Sunfish</td>
<td>0.25-1.0 mg/L 96 hours LC_{50}</td>
</tr>
<tr>
<td>Rainbow Trout</td>
<td>0.13-0.36 mg/L 96 hours LC_{50}</td>
</tr>
<tr>
<td>Inland Silverside</td>
<td>1.21 mg/L 96 hours LC_{50}</td>
</tr>
</tbody>
</table>

Invertebrate Toxicity  Sodium Dichloroisocyanurate acid

<table>
<thead>
<tr>
<th>Other Toxicity</th>
<th>Sodium Dichloroisocyanurate acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mallard Duck</td>
<td>Oral LD_{50}; 1916mg/Kg</td>
</tr>
<tr>
<td>Mallard Duck</td>
<td>LC_{50}; &gt;10,000ppm diet</td>
</tr>
<tr>
<td>Bobwhite Quail</td>
<td>Oral LD_{50}; 1732 mg/kg</td>
</tr>
<tr>
<td>Bobwhite Quail</td>
<td>LD_{50}; 10000 ppm diet</td>
</tr>
</tbody>
</table>

Persistence & Biodegradability: The materials used in this preparation will not persist in the environment. The free available chlorine from Sodium dishloroisocyanurate is rapidly consumed by reaction with organic and inorganic materials to produce chloride ion. The stable degradation products are chloride ion and cyanuric acid. Sodium Dichloroisocyanurate is subject to hydrolysis. Cyanuric acid produces by hydrolysis is biodegradable.

Bioaccumulative Potential: Trichloroisocyanuric acid hydrolyses in water liberating chlorine and cyanuric acid. These products are not bioaccumulative.

PBT Assessment: The substances contained in this preparation are not identified as PBT substances.

13. DISPOSAL CONSIDERATIONS.

Product Disposal
Do not put product, spilled product, partially filled containers into the waste compactor. Contact with incompatible materials could cause a reaction and fire. Do not transport damp or wet material. Neutralise materials to a non-oxidising state for safe disposal.

Disposal of Packaging
Clean Container and dispose of according to local and national regulations

14. TRANSPORT INFORMATION.

DOT Regulations:
Environmentally hazardous substances, solid, n.o.s, (UN3077) may be transported within USA not subject to DOT requirements of 49CFR172 - reference
49 CFR 172.101 (table) and 172.102 (special provision 335).
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ADR/IMDG/IATA:
Can be shipped as a limited quantity when packed in inner or single packs ≤ 5 kg.

ADR/IATA: When packed in inner or single packs ≤ 5 kg, Special Provision 375 of 2015 UN Model Regulations for the transportation of dangerous goods (IATA Special Provision A197) exempts this product from the labelling and documentation provisions of Dangerous Goods Regulations.

IMDG: IMDG 2014 (2.10.2.7)
Marine pollutants packaged in single or combination packagings containing a net quantity per single or inner packaging having a net mass per single or inner packaging of 5 kg or less for solids are not subject to any other provisions of this Code relevant to marine pollutants provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

ADR/RID  UN No. 3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Dichloroisocyanuric acid, salts)
Class: 9 - Miscellaneous Dangerous Substances and Articles
Classification Code: M7
Hazard identification No. 90
Packing group: III
Marking: Environmentally hazardous substance

IMO  UN No. 3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Dichloroisocyanuric acid, salts)
Class: 9 - Miscellaneous Dangerous Substances and articles
Label: 9
Mark: MARINE POLLUTANT
Packing Group: III

ICAO/IATA  UN No. 3077
Proper shipping name: Environmentally hazardous substance, solid, n.o.s (Dichloroisocyanuric acid, salts)
Class: 9
Hazard label(s): Miscellaneous
Packing group: III
Marking: Environmentally hazardous substance

15. REGULATORY INFORMATION.

15.1 Safety, health and environmental regulations/legislation specific for the mixture

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

DANGER
Corrosive. Causes irreversible eye damage.
Harmful if swallowed, inhaled or absorbed through skin.

This pesticide is toxic to fish and aquatic organisms

USA:
All the ingredients in this preparation are listed in the EPA TSCA Inventory.
This product is registered under FIFRA.

CERCLA/SARA – 302 ext. haz. substances – This material contains hazardous substance (Adipic Acid) as defined by CERCLA/SARA and the Reportable Quantity is 5000lbs.
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SARA (311,312) – This product is categorized as an immediate health hazard, and fire and reactivity physical hazard (Sodium Dichloroisocyanurate)

Massachusetts Right-to-Know Hazardous Substances list – Listed (Adipic Acid, Sodium Dichloroisocyanurate)

New Jersey Right-to-Know Hazardous Substances list – Listed (Adipic Acid, Sodium Dichloroisocyanurate)

Pennsylvania Right-to-Know Hazardous Substances list – Listed (Adipic Acid, Sodium Dichloroisocyanurate)

Rhode Island Right-to-Know Hazardous Substances list – Listed (Adipic Acid, Sodium Dichloroisocyanurate)

Workplace Classification – This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200)

Canada:
Canadian Chemical Inventory (DSL) – Listed

WHMIS hazard class –
D2B toxic materials
For Sodium dichloroisocyanurate:
C oxidizing materials
D1B toxic materials
For Sodium Carbonate:
E corrosive materials

The active substance is also listed in the following chemical inventories:

- Australian Chemical Inventory (AICS) – Listed
- China Chemical Inventory (IECSC) – Listed
- European Union Inventory (EINECS) – Reported
- Japan Chemical Inventory (ENCS) – Listed
- Korean Chemical Inventory (KECI) – Listed
- New Zealand Chemical Inventory (NZIOC) – Listed
- Philippines Priority Chemical List (PICCS) – Listed

The mixture is generally classified and registered as a disinfectant, biocide, or pesticide.

EU Regulation: If required for sale in Ireland (country of origin), the mixture is notified to the Pesticide Control Service, Department of Agriculture, Food and the Marine as a biocide under its appropriate trade name.

The product is generally classified as a biocide in the EU, and as such is subject to regulation under EU Regulation No. 528/2012 (Biocidal Products Regulation).

15.2 Chemical Safety Assessment

No data available.

16. OTHER INFORMATION.

The above information is intended to give general guidance as to health and safety. Whilst it is correct to the best of our knowledge and belief, no warranty can be given or implied that it will be adequate or applicable for all cases nor that the product will be suitable for any particular purpose since conditions of use are outside our control.
A UN 6(c) bonfire test conducted on plastic and fibreboard drums of Troclosene Sodium (CAS No. 2893-78-9) showed no evidence of explosive properties. Therefore, per Note T in the 30th ATP to Directive 67/548/EEC, this substance is not labeled as explosive when packaged in plastic or fibreboard containers or in bulk bags.

GHS Classification used in Section 3
Physical Hazard(s): Oxidizing Solid - Category 2
Contact Hazard - Eye: Category 2 - Causes serious eye irritation
Acute Toxicity - Oral: Category 4 - Harmful if swallowed
Target Organ Toxicity (Single Exposure): Category 3 - May cause respiratory tract irritation
Hazardous to Aquatic Environment - Acute Hazard: Category 1 - Very toxic to aquatic life
Hazardous to Aquatic Environment - Chronic Hazard: Category 1 - Very toxic to aquatic life with long lasting effects
Health Hazard Statement(s): H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
Physical Hazard Statement(s): H272 - May intensify fire; oxidizer
Environmental Hazard Statement(s): H410 - Very toxic to aquatic life with long lasting effects
Supplemental Hazard Statement: EUH031- Contact with acids liberates toxic gas

The inclusion of these phrases in Section 3 is mandatory according to Directive EC 1907/2006

REVISION HISTORY:
Revision No. 0 – SDS compiled for PURTABS product
1. Identification

Product identifier: QT-TB

Other means of identification:
- SDS number: 538N-57A
- Product code: HIL01011
- Product registration number: 1839-83-1658

Recommended use: Disinfectant/Cleaner

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name: HILLYARD INDUSTRIES
Address: 302 North Fourth St.
St. Joseph, MO 64501

Contact person: Regulatory Affairs
Telephone number: (816) 233-1321 (Ext. 8285)
Fax: (816) 383-8485
E-mail: regulatoryaffairs@hillyard.com
Emergency telephone #:
(800) 424-9300
(Only in the event of chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.)

2. Hazard(s) identification

Physical hazards: Flammable liquids Category 4

Health hazards:
-Serious eye damage/eye irritation Category 2B

Environmental hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements

- Hazard symbol: None.
- Signal word: Warning

Precautionary statement

Prevention: Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after handling. Wear protective gloves/eye protection/face protection.

Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. In case of fire: Use appropriate media to extinguish.

Storage: Store in a well-ventilated place. Keep cool.

Disposal: Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law in compliance with applicable federal, state and local requirements.

Hazard(s) not otherwise classified (HNOC): None known.

Supplemental information: None.

3. Composition/information on ingredients

Mixtures
**4. First-aid measures**

**Inhalation**
Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion**
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth thoroughly. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

**Most important symptoms/effects, acute and delayed**
Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

**5. Fire-fighting measures**

**Suitable extinguishing media**
Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.

**Special protective equipment and precautions for firefighters**
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 so without risk.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials.

**General fire hazards**
Combustible liquid.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL.

PESTICIDE STORAGE - Store in a dry place no lower in temperature than 50ºF or higher than 120ºF.

Keep away from heat, sparks and open flame. Store away from incompatible materials (see Section 10 of the SDS).

Do not contaminate water, food or feed by storage or disposal. Pesticide Storage: Open dumping is prohibited. Store in original container in areas inaccessible to children.

8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>US. ACGIH Threshold Limit Values</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>TWA</td>
<td>10 ppm</td>
<td>Inhalable fraction and vapor.</td>
</tr>
</tbody>
</table>

Biological limit values

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

Appropriate engineering controls

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. Provide eyewash station.

Individual protection measures, such as personal protective equipment

Eye/face protection

Use safety eyewear with splash guards or side shields, chemical goggles, or face shields.

Skin protection

Hand protection

Wear protective gloves.

Other

None normally required. If unable to avoid prolonged or repeated contact with skin, wear impervious clothing.

Respiratory protection

Not normally required with adequate ventilation. 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.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. 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.

9. Physical and chemical properties

Appearance

Clear, colorless liquid

Physical state

Liquid.

Form

Liquid.

Color

Colorless

Odor

Lemon odor

Odor threshold

Not available
pH: 12 - 13 Concentrate

Melting point/freezing point: Not applicable / Not available

Initial boiling point and boiling range: 210 °F (98.89 °C)

Flash point: > 180.0 °F (> 82.2 °C) Tag Closed Cup

Evaporation rate: < 1 (ethyl ether = 1)

Flammability (solid, gas): Not available.

Upper/lower flammability or explosive limits
- Explosive limit - lower (%): Not available.
- Explosive limit - upper (%): Not available.

Vapor pressure: 17.36 mm Hg

Vapor density: 1.03 Air = 1

Relative density: 1.02 at 77°F

Solubility(ies)
- Solubility (water): 100 % Complete

Partition coefficient (n-octanol/water): Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available

Other information
- Density: 8.49 lb/gal
- Percent volatile: 96.5 - 97.5 %
- VOC (Weight %): 8.01 %

10. Stability and reactivity

Reactivity: Reacts violently with strong acids. This product may react with oxidizing agents.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals. Contact with incompatible materials.


Hazardous decomposition products: No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

- Inhalation: Prolonged inhalation may be harmful.
- Skin contact: No adverse effects due to skin contact are expected.
- Eye contact: Causes eye irritation.
- Ingestion: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics: Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort.

Information on toxicological effects

Acute toxicity: Toxicity data is not available for this mixture. Data below are estimates based on summation methods.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>QT-TB</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>Rabbit</td>
<td>33750 mg/kg estimated</td>
</tr>
<tr>
<td>Product</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>5882.353 mg/l, 2 Hours estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>5871.021 mg/l, 4 Hours estimated</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>24837.5996 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>27265.4043 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>27500 mg/kg estimated</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>48439.9336 mg/kg estimated</td>
</tr>
<tr>
<td><strong>LD50</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guinea pig</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol (CAS 112-34-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Dermal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>2700 mg/kg</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>2000 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>2400 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>2200 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>4500 mg/kg</td>
</tr>
</tbody>
</table>

| Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8) |           |                                                  |
| **Acute**               |           |                                                  |
| **Oral**                |           |                                                  |
| LD50                    | Rat       | > 2000 mg/kg                                     |

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

**Skin corrosion/irritation**
Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**
Causes eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**: Not a respiratory sensitizer.
- **Skin sensitization**: This product is not expected to cause skin sensitization.
- **Germ cell mutagenicity**: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Not listed.

**Reproductive toxicity**
This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
Not classified.

**Specific target organ toxicity - repeated exposure**
Not classified.

**Aspiration hazard**
Prolonged inhalation may be harmful.

**Chronic effects**
Prolonged inhalation may be harmful.

**12. Ecological information**

**Ecotoxicity**
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
### Product Test Results

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
</tr>
</tbody>
</table>

| **Components** | | |
| Aquatic | |
| 2-(2-butoxyethoxy)ethanol (CAS 112-34-5) | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 1300 mg/l, 96 hours |
| Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8) | |
| Fish | LC50 | Bluegill (Lepomis macrochirus) | 472 - 500 mg/l, 96 hours |

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

### Persistence and degradability

No data is available on the degradability of this product.

### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Partition coefficient n-octanol / water (log Kow)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>0.56</td>
</tr>
</tbody>
</table>

### 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**

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. Buyer assumes all risk and liability associated with disposal of this product (original concentration or dilution) in violation of applicable law.

**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**

PESTICIDE DISPOSAL – Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Contaminated packaging**

CONTAINER DISPOSAL – Nonrefillable container. Do not reuse or refill container. Clean container promptly after emptying. Triple rinse as follows: Fill container ¼ full with water. Tip container on its side and roll it back and forth, ensuring at least one complete revolution for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Repeat this procedure two more times. Offer for recycling or reconditioning, if available. If not available, puncture and dispose in a sanitary landfill. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport information

**DOT**

Not regulated as dangerous goods.

### 15. Regulatory information

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List or Exempt.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.
SARA 304 Emergency release notification
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)
Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations
Safe Drinking Water Act (SDWA)
Not regulated.

FIFRA Information
FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 1839-83-1658, and is subject to certain labeling requirements under Federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide products. The hazard information required on the pesticide label is reproduced here.

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION
KEEP OUT OF REACH OF CHILDREN. Causes moderate eye irritation. Avoid contact with eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

FIRST AID: Have the product container or label with you when calling a poison control center or doctor, or going for treatment. If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person. If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.
NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

US state regulations
US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)
Not listed.

US. Massachusetts RTK - Substance List
Not regulated.

US. New Jersey Worker and Community Right-to-Know Act
Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law
Not listed.

US. Rhode Island RTK
Not regulated.

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories
Country(s) or region: United States & Puerto Rico
Inventory name: Toxic Substances Control Act (TSCA) Inventory
On inventory (yes/no): Yes

*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, including date of preparation or last revision

Issue date: 04-04-2015
Version #: 01
HMIS® ratings
- Health: 1
- Flammability: 2
- Physical hazard: 0

Disclaimer
No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose, or of any nature are made with respect to the product(s) or information contained in this material safety data sheet. The information and recommendations contained in this Material Safety Data Sheet are supplied pursuant to 29 CFR 1910.1200 of the Occupational Safety and Health Standards Hazard Communication Rule. All information contained herein is presented in good faith and is believed to be appropriate and accurate. The buyer or user assumes all risks associated with the use, misuse or disposal of this product. The buyer or user is responsible to comply with all federal, state or local regulations concerning the use, misuse or disposal of these products.
Q.T.® 3

A hard surface cleaner disinfectant with a broad claim set provides efficacy against a wide array of pathogens with fast contact times.
One minute - HIV-1, Influenza Type A / Hong Kong, Three minute - Broad spectrum of bacterial, viral and fungal and Five minute - Norovirus, Feline Calicivirus.
- Fast Contact Times
- Cost Effective Concentrate
- Broad Claim Set
- Simple, Fast Spray Application

Technical Specifications
Appearance Clear to slightly hazy
Dilution Rate 1:128
Color Blue
Scent Floral
Non Volatile Matter 33.0 - 35.0%
pH @ 25 deg. C 12.0 - 13.5

Safety
See material safety data sheet and product for safety information, handling and proper use.

HMIS (Concentrate/RTU)
Flammability = 2 Health = 3 Reactivity = 0

Availability
HIL0084325 4 - 2.5 Liter Containers

Directions
DIRECTIONS FOR USE It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging materials must be removed from the room or carefully protected.

Preparation of Disinfectant Use-Solution: Mix ½ -- 1 oz. per gallon of water. For heavy duty use, mix 2 oz. per gallon of water. Use 1 oz. per gallon of water to kill Norovirus, Enterobacter aerogenes, Serratia marcescens and Enterovirus D68.

Disinfection / Virucidal* / Fungicidal / Mold and Mildew Control Directions: Spray use-solution 6- 8 inches from hard, nonporous surfaces, thoroughly wetting surfaces. Treated surfaces must remain wet for 3 minutes. Rub with a brush, sponge or cloth. Do not breathe spray. For disinfection against Enterovirus and Norovirus use 5 minute contact time. For disinfection against Legionella pneumophilia, and SARS Associated Coronavirus use 10 minute contact time. Wipe dry with a cloth, sponge or mop or allow to air dry. For heavily soiled areas, a preliminary cleaning is required. Rinse all surfaces that come in contact with food such as countertops, appliances, tables and stovetops with

PO Box 909  St. Joseph, MO 64502  www.hillyard.com  800.365.1555
potable water before reuse. Do not use on utensils, glassware and dishes. To disinfect food processing facilities: Spray solution 6-8 inches from the surfaces and allow to remain wet for 3 minutes. Rinse food contact surfaces with potable water prior to reuse.

**Bactericidal Stability of Use-Dilution:** Tests confirm that the use solution of this product, when stored in a sealed container such as a spray bottle, remains effective for 90 days at the indicated bacterial contact time. If product becomes visibly dirty or contaminated, the use-dilution must be discarded and fresh product prepared. Always use clean, properly labeled containers when diluting this product.

**For fungicidal activity: Q.T. 3** is an effective fungicide against Trichophyton mentagrophytes (the athlete's foot fungus) when used on surfaces in areas such as locker rooms, dressing rooms, shower and bath areas and exercise facilities.

Q.T. 3 is a one-step fungicide at 1/2 oz. per gallon in 250 ppm hard water and 5% serum.

**For mold and mildew:** At ½ -- 1 oz. per gallon, Q.T. 3 will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, nonporous surfaces. Follow disinfection instructions. Repeat treatment every seven days, or more often if new growth appears. This product is not to be used as a terminal sterilant / high level disinfectant on any surface or instrument that (1) is introduced directly into the human body, either into or in contact with the bloodstream or normally sterile areas of the body, or (2) contacts intact mucous membranes but which does not ordinarily penetrate the blood barrier or otherwise enter normally sterile areas of the body. This product may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization or high level disinfection.

**For Use on Finished Floors:** To limit gloss reduction use Q.T. 3 at ½ -- 1 oz. per gallon. Spray onto floor. Allow surface to remain wet for contact time indicated on the label. Wipe or allow to air dry. Do not use on floor finish at 2 oz. per gallon.

*KILLS HIV AND HBV AND HCV ON PRE-CLEANED ENVIRONMENTAL SURFACES / OBJECTS PREVIOUSLY SOILED WITH BLOOD / BODY FLUIDS* in health care settings or other settings in which there is an expected likelihood of soiling of inanimate surfaces / objects with blood or body fluids, and in which the surfaces / objects likely to be soiled with blood or body fluids can be associated with the potential for transmission of Human Immunodeficiency Virus Type 1 (HIV-1) or Hepatitis B Virus (HBV) or Hepatitis C Virus (HCV).

**Special Instructions for Cleaning and Decontamination against HIV-1 or HBV or HCV on Surfaces / Objects Soiled With Blood / Body Fluids.**

**Personal Protection:** Cleanup must always be done wearing protective gloves, gowns, masks and eye protection.

**Cleaning Procedure:** Blood and other body fluids containing HIV-1 or HBV or HCV must be thoroughly cleaned from surfaces and objects before application of Q.T. 3.

**Contact Time:** Leave surface wet for 1 minute for HIV-1 and 3 minutes for HBV and HCV with a ½ -- 1 oz. per gallon use-solution. Use contact time indicated on the label for disinfection against all other viruses, bacteria and fungi claimed.

**Disposal of Infectious Material:** Blood, body fluids, cleaning materials and clothing must be disposed of according to local regulations for infectious waste disposal.

**Non-Acid Toilet Bowl and Urinal Disinfectant / Cleaner Directions:** Add ½ -- 1 oz. product to toilet water. Use 1 oz. per gallon of water to kill Norovirus, Enterobacter aerogenes, and Serratia marcescens. Brush or swab thoroughly, allow to stand for contact time indicated on the label and flush.

**To Sanitize Non-Food Contact Surfaces:** Mix ½ oz. of Q.T. 3 per gallon of water to sanitize hard nonporous surfaces. Treated surfaces must remain wet for 15 seconds. Wipe dry with a sponge, mop or cloth or allow to air dry. Do not use in food preparation, food handling and food storage areas. This product is not to be used on glassware, dishware, cookware or utensils.
To Clean and Deodorize: Mix ½ -- 1 oz. of Q.T. 3 per gallon of water to clean and deodorize surfaces. Apply using a sprayer. Wipe or allow to air dry.

DEODORIZING DIRECTIONS:

Spray Solutions: ½ -- 1 oz. per gallon of water eliminates undesirable odors. Allow surfaces to air dry.

Carpets: ½ -- 1 oz. per gallon of water eliminates odors associated with urine, vomit, smoke, and mildew. Reapply using a spray device after cleaning for freshening effects. Allow to dry.

Sewage Backup, Water Damage: 1 -- 2 oz. per gallon of water or desired concentration. Spray over affected areas before and after cleaning and extraction. Allow ten minutes contact time. Use proper ventilation; open windows.

Cleaning Solution: Dilute ½ -- 1 oz. per gallon of water for cleaning of kitchen counters, tables, walls, bathrooms, toilet seats, floors and large routine applications. Apply to surfaces using trigger spray or other spray device. Remove excess liquid or allow surfaces to air dry.