HILLYARD The Cleaning Resource®

SAFETY DATA SHEET

1. Identification

Product identifier QT 3

Other means of identification

SDS number 584N-167A
Product code HIL00717
Product registration 6836-349-1658

number

 Recommended use
 Disinfectant/Cleaner

 Recommended restrictions
 For Labeled Use Only

 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

Corrosive to metals Category 1

Health hazards Acute toxicity, oral Category 4

Skin corrosion/irritation Category 1C
Serious eye damage/eye irritation Category 1
Hazardous to the aquatic environment, acute Category 2

Environmental hazards Hazardous to the aquatic environment, acute

hazard

Hazardous to the aquatic environment, Category 2

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Combustible liquid. May be corrosive to metals. Harmful if swallowed. Causes severe skin burns

and eye damage. Causes serious eye damage. Toxic to aquatic life. Toxic to aquatic life with long

lasting effects.

Material name: QT 3 SDS US

HIL00717 Version #: 04 Revision date: 07-22-2019 Issue date: 10-10-2016

Precautionary statement

Prevention Keep away from flames and hot surfaces-No smoking. Keep only in original container. Do not

breathe mist or vapor. Wash thoroughly after handling. Do not eat, drink or smoke when using this

product. Avoid release to the environment. Wear protective gloves/protective clothing/eye

protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do Response

> NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing. Immediately call a poison center/doctor. In case of fire: Use

appropriate media to extinguish. Absorb spillage to prevent material-damage.

Store in a well-ventilated place. Keep cool. Store locked up. Store in corrosive resistant container Storage

with a resistant inner liner.

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. Container Disposal: Nonrefillable container. Do not reuse or refill this container.

Wrap empty container and put in trash.

Hazard(s) not otherwise classified (HNOC)

None known.

Supplemental information

None.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| Alkyl dimethyl benzyl ammonium chloride (C12-16) | | 68424-85-1 | 10 - < 20 |
| Didecyldimethylammonium Chloride (ddac (c8-10)) | | 68424-95-3 | 10 - < 20 |
| Alcohols, C9-11, ethoxylated | | 68439-46-3 | 5 - < 10 |
| Ethanol | | 64-17-5 | 3 - < 5 |
| Tetrasodium ethylenediamine tetraacetate | | 64-02-8 | 3 - < 5 |
| Other components below reportable le | evels | | 60 - < 70 |

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

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

Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a physician or Skin contact

poison control center immediately. Chemical burns must be treated by a physician. Wash

contaminated clothing before reuse.

Eye contact Immediately flush eves with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

Call a physician or poison control center immediately. Rinse mouth, Do not induce vomiting, If Ingestion

vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Most important

symptoms/effects, acute and

delayed

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. 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. Show this safety data sheet to the doctor in attendance. Wash contaminated

clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2). 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.

Combustible liquid. General fire hazards

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 breathe mist or vapor. 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. Prevent entry into waterways, sewer, basements or confined areas.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spillage to prevent material damage. 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. Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. 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: Open dumping is prohibited. Store in original container in areas inaccessible to children.

8. Exposure controls/personal protection

Occupational exposure limits

Biological limit values

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

| US. OSHA Table Z-1 Limits for A Components | Туре | Value | |
|--|----------------|------------|--|
| Ethanol (CAS 64-17-5) | PEL | 1900 mg/m3 | |
| | | 1000 ppm | |
| US. ACGIH Threshold Limit Valu | es | | |
| Components | Туре | Value | |
| Ethanol (CAS 64-17-5) | STEL | 1000 ppm | |
| US. NIOSH: Pocket Guide to Che | emical Hazards | | |
| Components | Туре | Value | |
| Ethanol (CAS 64-17-5) | TWA | 1900 mg/m3 | |
| | | 1000 ppm | |

Material name: QT 3 SDS US

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

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Appropriate engineering

controls

Good general ventilation 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.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Chemical safety goggles when working with concentrate.

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other Wear appropriate chemical resistant clothing. Avoid contact with eyes, skin and clothing. If contact

is likely, wear protective clothing appropriate to use conditions.

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.

Thermal hazards None known.

General hygiene considerations

When using do not smoke. Keep away from food and drink. 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 to slightly hazy, blue liquid

Physical state Liquid.
Form Liquid.
Color Blue
Odor Floral odor
Odor threshold Not available.
pH 12.00 - 13.50

Melting point/freezing point Not applicable / Not available

Initial boiling point and boiling

range

Flash point

144.0 °F (62.2 °C) Tag Closed Cup

206 °F (96.67 °C)

Evaporation rate < 1 Ethyl ether = 1
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 18.38 mm Hg

Vapor density 0.675 Air = 1

Relative density 1.004 at 77°F

Solubility(ies)

Solubility (water) 100 %

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Density8.36 lb/galExplosive propertiesNot explosive.Oxidizing propertiesNot oxidizing.Percent volatile65 - 67 %VOC3.48 %

10. Stability and reactivity

Reactivity Reacts violently with strong acids. This product may react with oxidizing agents. May be corrosive

to metals.

Chemical stability

Possibility of hazardous

reactions

Material is stable under normal conditions.

Hazardous polymerization does not occur.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid

temperatures exceeding the flash point. Contact with incompatible materials. Do not mix with other

chemicals.

Incompatible materials Acids. Strong oxidizing agents. Oxidizing agents. Metals.

Hazardous decomposition

products

No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact Causes severe skin burns.

Eye contact Causes serious eye damage.

Ingestion Causes digestive tract burns. Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including

blindness could result.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components Species Test Results

Ethanol (CAS 64-17-5)

<u>Acute</u>

Inhalation

LC50 Mouse 39 mg/l, 4 Hours

Oral

LD50 Rat 6.2 g/kg

Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)

Acute

Oral

LD50 Rat > 2000 mg/kg

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Possible reproductive hazard.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity Toxic to aquatic life with long lasting effects.

| Product | | Species | rest Results |
|------------|------|---------|----------------------------------|
| QT 3 | | | |
| Aquatic | | | |
| Crustacea | EC50 | Daphnia | 89.9658 mg/l, 48 hours estimated |
| Fish | LC50 | Fish | 52.4509 mg/l, 96 hours estimated |
| Components | | Species | Test Results |

Alcohols, C9-11, ethoxylated (CAS 68439-46-3)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 2.9 - 8.5 mg/l, 48 hours
Fish LC50 Fathead minnow (Pimephales promelas) 6 - 12 mg/l, 96 hours

Alkyl dimethyl benzyl ammonium chloride (C12-16) (CAS 68424-85-1)

Aquatic

Fish LC50 Striped bass (Morone saxatilis) 10.4 - 19.1 mg/l, 96 hours

Ethanol (CAS 64-17-5)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 7.7 - 11.2 mg/l, 48 hours
Fish LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Tetrasodium ethylenediamine tetraacetate (CAS 64-02-8)

Aquatic

Fish LC50 Bluegill (Lepomis macrochirus) 472 - 500 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Ethanol -0.31

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 instructionsBuyer assumes all risk and liability associated with disposal of this product (original concentration

or dilution) in violation of applicable law.

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.

Local disposal regulations Dispose

Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH <=2 or =>12.5, or corrosive to steel]

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 Container Disposal: Nonrefillable container. Do not reuse or refill this container. Wrap empty

container and put in trash.

Material name: QT 3 sps us

14. Transport information

DOT

UN number UN1903

UN proper shipping name Disinfectants, Liquids, Corrosive, n.o.s. (Quaternary Ammonium Compounds)

Transport hazard class(es)

Class 8
Subsidiary risk Label(s) 8
Packing group III

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions 8, 146, 335, IB3, T4, TP1, TP29

Packaging exceptions 155
Packaging non bulk 203
Packaging bulk 241
ERG number 153

PACKAGES 1 GALLON AND SMALLER ARE SHIPPED LIMITED QUANTITY OR ORM-D

Transport in bulk according to Not established.

Annex II of MARPOL 73/78 and

the IBC Code

DOT



General information This material is regulated under IATA and IMDG regulations. Contact manufacturer for shipping

instructions.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

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.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

Classified hazard Flammable (gases, aerosols, liquids, or solids)

categories Corrosive to metal

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

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Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Ethanol (CAS 64-17-5)

FIFRA Information

FIFRA: This product is a U.S. EPA Registered pesticide, EPA Reg. No. 6836-349-1658, 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.

Low priority

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS.

DANGER. Corrosive. Causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), protective clothing and protective (rubber or chemical resistant) gloves. Harmful if swallowed or if absorbed through the skin. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

KEEP OUT OF REACH OF CHILDREN

DANGER/PELIGRO

FIRST AID: IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. 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. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | 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
 10-10-2016

 Revision date
 07-22-2019

Version # 04

HMIS® ratings Health: 3

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.

Revision information

Product and Company Identification: Product and Company Identification

Hazard(s) identification: Hazard statement

Hazard(s) identification: Disposal Hazard(s) identification: Response

Composition / Information on Ingredients: Ingredients

Accidental release measures: Personal precautions, protective equipment and emergency

procedures

Handling and storage: Precautions for safe handling Exposure controls/personal protection: Other Physical & Chemical Properties: Multiple Properties

Ecological information: Ecotoxicity

Transport Information: Proper Shipping Name/Packing Group

Regulatory information: US state regulations HazReg Data: International Inventories

GHS: Classification