

**SAFETY DATA SHEET**

**1. Product and Company Identification**

<b>Product Name</b>	<b>MARK 10 QUAT</b>
<b>Product Number</b>	<b>146</b>
<b>Product Type</b>	Mixture
<b>Product Use</b>	EPA Registration Number: 10324-81 Disinfectant/Food-Contact Sanitizer. This product is intended to be diluted prior to use. For further information refer to the EPA Registered product label. Uses other than those identified are not recommended.

**Product dilution information:** Disinfectant: 2-3½ ounces per 4½ gallons; Sanitizer: 1-2⅔ ounces per 4 gallons; Laundry sanitizer: 16 ounces per 100 pounds laundry. Refer to EPA registered label for product dilution/application directions for use.

<b>Manufacturer/Supplier</b>	National Purity, LLC. 6840 Shingle Creek Parkway, Suite #23 Brooklyn Center, MN 55430
<b>Company Contact</b>	612-672-0022
<b>Emergency Telephone Number</b>	1-800-255-3924
<b>Email</b>	customerservice@nationalpurity.com

**2. Hazards Identification**

**Emergency overview**

Appearance: Clear solution with characteristic odor  
 Precautionary statements: Causes severe skin burns and serious eye damage  
 Harmful if swallowed

**GHS Classification in accordance with 29 CFR 1910 OSHA HCS**

**Health**

Serious eye damage/eye irritation	Category 1
Skin corrosion/irritation	Category 1B
Acute toxicity (oral)	Category 4
Acute toxicity (dermal)	Category 4

**Product at Use-Dilution**

Serious eye damage/eye irritation Category 2B

**GHS Label elements, including precautionary statements**

**Pictogram**



**Signal word**

**DANGER!**

**Hazard Statements**

H302  
 H312

**Harmful if swallowed**  
**Harmful in contact with skin**

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H314

**Causes severe skin burns and eye damage**

**Precautionary Statements**

**Prevention**

P262

**Do not get in eyes, on skin, or on clothing**

P264

**Wash affected areas thoroughly after handling**

P270

**Do not eat, drink or smoke when using this product**

P280

**Wear protective gloves and eye, face and foot protection**

**Response**

P301+P312+P330+331

**IF SWALLOWED, Rinse mouth. Call a POISON CENTER/doctor if you feel unwell. DO NOT INDUCE VOMITING.**

P303+P361+P353

**IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.**

P305+P351+P338

**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**

P304+P340

**IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**

P310

**Immediately call a POISON CENTER or doctor/physician.**

P363

**Wash contaminated clothing before reuse.**

**Storage/Disposal**

P233

**Keep container tightly closed.**

P234

**Keep only in original container.**

P501

**Dispose of contents and container to an approved waste disposal plant.**

<b>Product at Use-Dilution</b>	
Hazard pictograms/symbols	None
Signal Word:	Warning
Hazard Statements:	H320 <b>Causes eye irritation.</b>
Precautionary Statements: <b>Prevention</b>	P264 <b>Wash affected areas thoroughly after handling.</b>
<b>Response</b>	P305+P351+P338+P337+P313 <b>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 attention.</b>

### 3. Composition/Information on Ingredients

The following are criteria for listing components in this section: Ingredients that meet the criteria for carcinogenic, toxic to reproduction, or specific target organ toxicity and components otherwise considered hazardous according to OSHA which exceed the cut off limits for SDS specified by the criteria for mixtures are listed. Nonhazardous components are not listed. This is not a composition disclosure. Exact percentages are considered proprietary and a trade secret.

Chemical name	CAS number(s)	GHS Classification	Concentration, %
Alkyl (C <sub>12-16</sub> ) dimethylbenzyl ammonium chloride	68424-85-1	Serious eye damage/eye irritation: Category 1, Skin corrosion/irritation: Category 1B, Acute toxicity (oral): Category 3, Acute toxicity (dermal): Category 3; H301, H314, H318	>=7.125- <=7.875
Octyl decyl dimethyl ammonium chloride	32426-11-2		
Didecyl dimethyl ammonium chloride	7173-51-5		
Diocetyl dimethyl ammonium chloride	5538-94-3		

Other components		Not classified	Balance
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**Product at Use-Dilution**

Within the present knowledge of the supplier, this product does not contain any hazardous ingredients in quantities requiring reporting, in accordance with local regulations.

## 4. First Aid Measures

### Description of First Aid Procedures

**General Advice**

Show this material safety data sheet to medical personnel. Do not leave affected person unattended. Isolate exposed apparel for laundry before re-use.

**In Case of Eye Contact**

Rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Seek medical attention if irritation develops or persists.

**In Case of Skin Contact**

Take off contaminated clothing and shoes immediately. Wash affected areas with plenty of water. Seek medical attention if irritation develops or persists.

**If Ingested**

Do NOT induce vomiting. Do not give anything by mouth to an unconscious or convulsing person. Rinse mouth with water. Seek medical attention.

**If Inhaled**

Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

**Product at Use-Dilution**

**In Case of Eye Contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation persists.

**In Case of Skin Contact**

No known effect after skin contact. Rinse with water for a few minutes.

**If Ingested**

Get medical attention if symptoms occur

**If Inhaled**

No special measures required. Treat symptomatically.

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

**Risks**

The most important known symptoms and effects are described in the labeling (section 2.2) and/or in section 11. Corrosive effects. Symptoms may include stinging, tearing, redness, swelling and blurred vision. Permanent eye damage including blindness could result. Prolonged or repeated skin contact may aggravate existing skin conditions. Inhalation of mists may aggravate existing chronic respiratory conditions such as asthma, emphysema or bronchitis.

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

**Note to physician**

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically.

## 5. Fire-fighting Measures

**Flammable properties**

None

**Extinguishing media**

Use methods appropriate to the source of the fire.

**Protection of firefighters**

Firefighters should wear protective clothing including self-contained breathing apparatus

**Hazardous combustion products**

May include and not limited to oxides of carbon, and nitrogen.

**Unusual Fire, Explosion hazards**

Containers may melt or rupture from heat of fire. May form combustible mixtures with air when heated.

**Specific firefighting methods**

No special methods required. Move containers from area if it can be done without risk. Cool fire-exposed containers with water from side. Contain the extinguishing fluids by diking

## 6. Accidental Release Measures

**Personal precautions**

Spill area may be slippery. Wear appropriate protective equipment (See Sec. 8).

**Methods for containment**

Stop leak if safe to do so. Absorb spills with vermiculite, fuller's earth, or sand. Shovel up and place in a non-metal waste container for disposal. Dike large spills

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with soil or sandbags to contain it and prevent its spread. Keep in suitable, properly labeled, closed containers for disposal.

**Methods for cleaning up**

Wash non-recoverable remainder with large amounts of water. Clean contaminated surfaces thoroughly. Recover the cleaning water for subsequent disposal. Dispose of in accordance with local regulations

**Environmental precautions**

Avoid contact of spilled material and runoff with soil and surface waterways

**Additional advice**

Spill area may be slippery

**Product as Use-Dilution**  
 Use a water rinse for final clean-up

## 7. Handling and Storage

**Precautions for Safe Handling**

Does not require any specific or particular measures. Wear appropriate protective equipment including long chemical resistant gloves, chemical splash goggles and protective footwear. Handle in accordance with good industrial hygiene and safety practice. Do not spray toward face. Wash affected areas after use. Do not taste or swallow. Avoid breathing vapors or mists. Use only with adequate ventilation. Product residue may remain on/in empty containers. All precautions for handling the product must be used in handling the empty container and residue. **FOR COMMERCIAL AND INDUSTRIAL USE ONLY.**

**Product at Use-Dilution**  
 Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

**Conditions for Safe Storage**

Does not require any specific or particular measures. Storage class (TRGS 510): Non-combustible, corrosive materials. Keep container tightly closed. Opened containers must be carefully resealed and kept upright to prevent leakage. Hazardous reactions may occur on contact with certain chemicals. Refer to the list of incompatible materials section 10: "Incompatible materials"

**Product at Use-Dilution**  
 Keep out of reach of children. Keep container tightly closed.

## 8. Exposure Controls and Personal Protection

**Introductory remarks:**

These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal considerations. Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers

**Control parameters**

Components with workplace control parameters

Components	Value	Control parameters	Basis
Not reportable			

**Exposure controls**

**Control measures**

**Engineering measures**

Good general ventilation should be sufficient to control airborne levels. Respiratory protection is not required if good ventilation is maintained.

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**Personal protective equipment**

**Respiratory protection**

In operations where mists are generated, wear a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the specific work conditions.

**Hand protection**

Wear long chemical resistant gloves. Observe instructions regarding permeability and breakthrough time provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion and contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

**Eye protection**

Wear chemical splash goggles.

**Skin and body protection**

Wear footwear protecting against chemicals, and impervious clothing. Choose body protection according to the amount and concentration of the substances in the workplace.

**Hygiene measures**

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
- 3) Wash exposed skin promptly to remove accidental splashes or contact with material.

**Protective measures**

Ensure that eyewash stations and safety showers are close to the workstation location, and that emergency equipment is immediately accessible with instructions for use.

The protective equipment must be selected in accordance with current local standards and in following proper use instructions from the supplier of the protective equipment.

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the potential hazards, and/or risks that may occur during use.

**Product at Use-Dilution**

Respiratory protection:

A respirator is not needed under normal and intended conditions of product use

Hand protection:

No protective equipment is needed under normal use conditions

Eye protection:

No protective equipment is needed under normal use conditions

Skin and body protection:

No protective equipment is needed under normal use conditions

Hygiene measures:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

- 1) Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored
- 2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet
- 3) Wash exposed skin promptly to remove accidental splashes or contact with product

**9. Physical and Chemical Properties**

**Information on basic physical and chemical properties**

**Appearance/form**

Clear solution

**Color**

Dark red

**Odor**

Characteristic odor

**Odor threshold**

Not established

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<b>pH</b>	5-8
<b>Melting/freezing point</b>	Not established
<b>Initial Boiling point</b>	>100° C
<b>Flash point</b>	Does not flash
<b>Evaporation rate</b>	Not established
<b>Flammability</b>	Not flammable
<b>Upper/lower flammability or Explosive limits</b>	Not applicable
<b>Vapor pressure</b>	Not established
<b>Vapor density</b>	Not established
<b>Density</b>	0.99 g/ml, 8.3 lbs/gal (25°C)
<b>Solubility in water</b>	Water solubility: soluble
<b>Viscosity</b>	Low viscosity
<b>VOC</b>	Not established
<b>% Volatile</b>	Not established

#### Product at Use-Dilution

Appearance:	Clear solution
Color:	Light red
Odor:	Characteristic odor
pH:	5-8
Flash point:	Does not flash

**Other Safety Information** No information available

## 10. Stability and Reactivity

<b>Reactivity</b>	No information available
<b>Chemical Stability</b>	Stable and non-reactive under normal conditions of use, storage and transport
<b>Hazardous reactions</b>	No information available
<b>Conditions to avoid</b>	No information available
<b>Incompatible materials</b>	Anionic surfactants
<b>Hazardous decomposition products</b>	Oxides of carbon and nitrogen

## 11. Toxicological Information

### Product Summary:

Causes severe skin burns and serious eye damage. Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Ingestion may produce burns to the lips, oral cavity, upper airway, esophagus and possibly digestive tract. Vapors and spray mist may irritate throat and respiratory system and cause coughing.

No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

### Information on likely routes of exposure:

<b>Eye</b>	Corrosive. Causes serious eye damage. Symptoms may include pain, burning sensation, redness, watering, blurred vision or loss of vision.
<b>Skin</b>	Corrosive. Causes severe burns. Symptoms may include burns, blisters, redness and pain (which may be delayed).
<b>Ingestion</b>	Harmful if swallowed. Causes burns/serious damage to mouth, throat and stomach. Symptoms may include vomiting, nausea, and/or feeling of general unwellness.
<b>Inhalation</b>	May cause irritation and corrosive effects to nose, throat and respiratory tract. Symptoms may include coughing and difficulty breathing.
<b>Sensitization</b>	No known effects

## Product at Use-dilution

### Product Summary:

Causes eye irritation.

No data available for the teratogenicity, mutagenicity, or reproductive toxicity of this product. No data available to designate the product as causing specific target organ toxicity through repeated exposure. No data available to designate product as an aspiration hazard.

### Information on likely routes of exposure:

<b>Eye</b>	Causes eye irritation. Symptoms may include irritation, watering, redness
<b>Skin</b>	No known significant effects or critical hazards
<b>Ingestion</b>	No known significant effects or critical hazards
<b>Inhalation</b>	No known significant effects or critical hazards
<b>Sensitization</b>	No known effects

### Information on toxicological effects

#### Acute toxicity

Acute oral:	LD <sub>50</sub> 344-366 mg/kg
Acute dermal:	LD <sub>50</sub> 1500-3340 mg/kg
Acute inhalation:	No information available
Acute toxicity (other):	No information available

#### Skin corrosion/irritation

Skin irritation: Corrosive. Causes severe burns

#### Serious eye damage/eye irritation

Eye irritation: Corrosive. Causes serious eye damage

#### Respiratory or skin sensitization

Sensitization: Not classified as sensitizing by skin contact

## Product at Use-dilution

### Acute toxicity

Acute oral:	LD <sub>50</sub> >5000 mg/kg
Acute dermal:	LD <sub>50</sub> >2000 mg/kg
Acute inhalation:	No information available
Acute toxicity (other):	No information available

### Skin corrosion/irritation

Skin irritation: No known significant effects or critical hazards

### Serious eye damage/eye irritation

Eye irritation: Causes eye irritation

### Respiratory or skin sensitization

Sensitization: Not classified as sensitizing by skin contact

### Mutagenicity

Genotoxicity in vitro:	No information available
Genotoxicity in vivo:	No information available

### Carcinogenicity

Carcinogenicity: This product does not contain any ingredient designated as probable or suspected human carcinogens by IARC, ACGIH

### Toxicity for reproduction and development

Toxicity to reproduction/fertility:	No information available
Developmental toxicity/teratogenicity:	No information available

### Specific Target Organ Toxicity (STOT)

STOT-single exposure:	No information available
STOT-repeated exposure:	No information available

### Aspiration toxicity

Aspiration toxicity: No information available

### Other Hazards

No information available



## 12. Ecological Information

### Toxicity

Aquatic toxicity: Toxic to aquatic life

### Persistence and degradability

Biodegradation: No information available

### Bioaccumulative potential

Partition coefficient: n-octanol/water: No bioaccumulation is to be expected (log Pow<=4)

Bioconcentration factor (BCF): No information available

### Mobility in soil

Known distribution to environmental compartments: No information available

### Results of PBT and vPvB assessment

No information available

### Other adverse effects

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

## 13. Disposal Considerations

### Waste treatment methods

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.

Product disposal: Observe all applicable federal, state, and local regulations

Packaging: Remove all residue when emptying

### Product at Use-Dilution

#### Waste treatment methods

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.

Product disposal: Diluted product can be flushed to sanitary sewer

Packaging: Discard empty container in trash or offer for recycling

## 14. Transport Information

### Basic shipping requirements:

Proper shipping name: DISINFECTANTS, LIQUID, CORROSIVE, N.O.S. (QUATERNARY AMMONIUM COMPOUND)

Hazard class: 8

UN number: UN1903

Packing group: III

Special provisions:

Packaging exceptions: 49CFR173.154 Limited quantities. Inner packaging not over 1.3 gallons exempt for ground shipments.



DOT Hazard Classification: Not applicable

## 15. Regulatory Information

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

Notification status: Not applicable  
OSHA Hazard Communication Standard (26 CFR 1910.1200): Hazardous

### CERCLA (RQ)

Ingredient(s)	CAS#	Weight	CERCLA RQ	Section 302 TPQ
Not listed				

### SARA/EPCRA Extremely Hazardous Substances (302/304)

Ingredient(s)	CAS#	Weight	RQ	TPQ
Not listed				

### SARA Hazard Categories (311/312)

Fire	Reactive	Acute health hazard	Chronic health hazard
No	No	Yes	No

SARA Toxic Substances (313) The following components are subject to SARA Section 313 reporting requirements

Ingredient(s)	CAS#	Weight
Not listed		

### CAA (311) Volatile Organic compounds

Ingredient(s)	CAS#	Weight
Not listed		

### Other regulations

No information available

## 16. Other Information

NFPA-Classification		HMIS-Classification	
Health	3 high	Health	3 high
Flammability	0 insignificant	Flammability	0 insignificant
Instability or Reactivity	0 insignificant	Reactivity	0 insignificant
		HMIS PPE	B
		B=Safety glasses, Gloves	

### Product at Use-Dilution

NFPA-Classification		HMIS-Classification	
Health	1 slight	Health	1 slight
Flammability	0 insignificant	Flammability	0 insignificant
Instability or Reactivity	0 insignificant	Reactivity	0 insignificant
		HMIS PPE	

### Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH: American Conference of Governmental Industrial Hygienists	NIOSH: National Institute for Occupational Safety and Health
HMIS: Hazardous Materials Identification System	NTP: National Toxicology Program

IARC: International Agency for Research on Cancer	OSHA: Occupational Safety and Health Administration
NFPA: National Fire Protection Association	

**Disclaimer**

This document was created for reference purposes only. Based on the US EPA approved basic formulation. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of this publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Issue date**  
**Supersedes date**  
**Reason for Update**

June 9, 2022  
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 Update Section 9