

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: Quab® 360

Other means of identification
None.

Recommended restrictions

Recommended use: For industrial use
Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Company Name : Quab Chemicals, Inc.
250 Pehle Avenue, Suite 403
Saddle Brook, NJ 07663
USA

Telephone : +1 201 556 0300

Fax : +1 201 556 0335

Manufacturer

Emergency telephone number:

24-Hour Health : +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency : +1 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)
+1 973 929 8060 (Product Regulatory Services)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral)	Category 4
Acute toxicity (Dermal)	Category 4
Serious Eye Damage/Eye Irritation	Category 1
Specific Target Organ Toxicity - Repeated Exposure	Category 2

Environmental Hazards

Acute hazards to the aquatic environment	Category 1
Chronic hazards to the aquatic environment	Category 1

Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

Harmful if swallowed or in contact with skin.
Causes serious eye damage.
May cause damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention:

Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid release to the environment.

Response:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water/... IF SWALLOWED: Call a POISON CENTRE/doctor/... if you feel unwell. Rinse mouth. Immediately call a POISON CENTER/doctor. Specific measures (see this label). Wash contaminated clothing before reuse. Collect spillage.

Disposal:

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Quaternary ammonium compounds, (3-chloro-2-hydroxypropyl)coco alkyldimethyl, chlorides		690995-44-9	25 - <50%
2,3-Dihydroxypropyldimethyldodecylammonium chloride		103947-09-7	1 - <3%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information:	Pay attention to self-protection. Remove victims from hazardous area. Immediately remove soiled or soaked clothing and remove it to a safe distance. Keep victim warm, in a stabilized position and covered. Do not leave victims unattended. If the casualty is unconscious: Place the victim in the recovery position.
Inhalation:	Potential for exposure by inhalation if aerosols or mists are generated. Move victims into fresh air. With labored breathing: Provide with oxygen. Consult a doctor. If the casualty is not breathing: Perform mouth-to-mouth resuscitation, notify emergency physician immediately.
Skin Contact:	Wash off affected area immediately with plenty of water for at least 15 minutes. If symptoms persist, consult a physician for treatment.
Eye contact:	With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. Consult an ophthalmologist immediately if the symptoms persist. When dealing with caustic substances, notify emergency physician immediately (key words: burns in eye).
Ingestion:	Rinse mouth. Immediately give large quantities of water to drink. Obtain medical attention. When dealing with caustic substances, notify emergency physician immediately.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms/effects, acute and delayed

Symptoms:	Irritation of skin and mucous membranes Corrosive daze, Headache, vertigo, somnolence (sleepiness), nausea. Health injuries may be delayed.
Hazards:	Strongly irritating to corrosive. Harmful in contact with skin and if swallowed. Vapours may cause drowsiness and dizziness.

Indication of immediate medical attention and special treatment needed

Treatment:	The initial focus is only on the local action, characterized by quickly progressing deep tissue damage. In the eye, caustic/ irritating and harmful liquids cause, depending on the intensity of exposure, various levels of irritation, destruction, and ablation of the epithelium of the conjunctiva and cornea, corneal clouding, edema and ulcerations. Danger! Possible loss of eyesight! Superficial irritations and damage up to ulcerations and scarring develop on the skin. After accidental absorption in the body, the pathology and clinical findings are dependent on the kinetics of the substance (quantity of absorbed substance, the absorption time, and the effectiveness of early elimination measures (first aid)/ excretion - metabolism). A specific action of the substance is unknown. In case of substances with high water solubility, irritations up to formation of necrosis in the upper respiratory tract may result after inhalation of caustic/ irritating aerosols and mists. The initial focus is on the local action: signs of irritation of the respiratory tract such as coughing, burning behind the sternum, tears, burning in the eyes or nose.
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There is a risk of pulmonary edema!

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water. mist quenching powder foam

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: In the case of fire, the following hazardous smoke fumes may be produced: carbon monoxide, nitric oxides, chlorine. Hydrogen chloride.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear. Water for fire fighting must not be introduced in the sewer system, subsoil, or surface waters. Assure that there are sufficient fire water retaining facilities
Contaminated fire fighting water must be disposed of in conformity with the regulations of the local authorities.

Special protective equipment for fire-fighters: No data available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe spray. Keep unauthorized personnel away. Keep out unprotected persons.

Accidental release measures: Observe regulations on prevention of water pollution (collect, dam up, cover up).

Methods and material for containment and cleaning up: Absorb with liquid-binding material (e.g. inert absorbent or universal binder). Dispose of absorbed material in accordance with the regulations. Rinse away any residue with plenty of water.

Environmental Precautions: Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): No data available.

Safe handling advice:	Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment. Avoid formation of aerosol. Immediately change moistened and saturated work clothes. Handle in accordance with good industrial hygiene and safety practice.
Contact avoidance measures:	No data available.
Hygiene measures:	Avoid contact with skin and eyes. Avoid contaminating clothes with product. Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Apply adequate skin protection agents before handling the product. Assure skin cleaning and skin care after work. Preventive skin protection is recommended. Clean skin with soap, then apply a fatty skin cream.

Storage

Safe storage conditions:	Store in the original receptacle, keeping this tightly sealed, under cool and dry conditions. Use shatterproof containers. Transport and store container in upright position only. Always close container tightly after removal of product. Under the recommended storage conditions, the active substance and quaternary inactive ingredients are not volatile. In order to ensure due transportation, make certain that stacks are of the correct height, containers are securely fastened so as not to fall off, and labelled according to the regulations.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

None of the components have assigned exposure limits.

Appropriate Engineering Controls	No data available.
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Individual protection measures, such as personal protective equipment

Eye/face protection:	goggles
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Skin Protection

Hand Protection:	Material: Polychloroprene with natural-latex liner. Additional Information: Use impermeable gloves.
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Skin and Body Protection:	A safety shower and eye wash fountain should be readily available. To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.
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Respiratory Protection:	A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.
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Hygiene measures: Avoid contact with skin and eyes. Avoid contaminating clothes with product. Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Apply adequate skin protection agents before handling the product. Assure skin cleaning and skin care after work. Preventive skin protection is recommended. Clean skin with soap, then apply a fatty skin cream.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	colourless to yellow
Odor:	odourless
Odor Threshold:	No data available.
pH:	3 - 6 (20 °C)
Freezing point:	Not applicable
Boiling Point:	Approximate 100 °C
Flash Point:	Not applicable
Evaporation Rate:	No data available.
Flammability (solid, gas):	not flammable
Explosive limit - upper (%):	not relevant, since based on water
Explosive limit - lower (%):	not relevant, since based on water
Vapor pressure:	Not applicable
Vapor density (air=1):	No data available.
Density:	1 g/cm ³ (20 °C)
Relative density:	No data available.
Solubility in Water:	in all proportions
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable
Self Ignition Temperature:	not spontaneously flammable
Decomposition Temperature:	No data available.
Kinematic viscosity:	No data available.
Dynamic viscosity:	120 mPa.s (20 °C)
Other information	
Explosive properties:	not explosive
Oxidizing properties:	Not to be expected in view of the structure
Minimum ignition temperature:	Not applicable

10. Stability and reactivity

Reactivity:	No further information available
Chemical Stability:	No further information available
Possibility of hazardous reactions:	No further information available

Conditions to avoid:	No further information available
Incompatible Materials:	alkalis.
Hazardous Decomposition Products:	Hydrogen chloride. chloracetone chloromethane Hydro-cyanic acid

11. Toxicological information

Information on likely routes of exposure

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral	
Product:	LD 50 (Rat): 541 mg/kg
Dermal	
Product:	LD 50 (Rat): > 1,000 mg/kg
Inhalation	
Product:	Not classified for acute toxicity based on available data.

Repeated dose toxicity

Product:	LOAEL (Rat, Oral): 100 mg/l (Target Organ(s): atrophy of the spleen, Irritative effect:, stomach) Feeding experiments Subacute toxicity
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Skin Corrosion/Irritation

Product:	Slightly irritating. OECD 404 (Rabbit, 4 h): Slightly irritating.
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Serious Eye Damage/Eye Irritation

Product:	Corrosive Rabbit: Corrosive
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Respiratory or Skin Sensitization

Product:	Maximization Test, OECD 406 (Guinea Pig): Not a skin sensitizer.
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Carcinogenicity

Product: Contains no carcinogenic substances as defined by NTP, IARC and/or OSHA.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

US. National Toxicology Program (NTP) Report on Carcinogens:

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

Germ Cell Mutagenicity

In vitro

Product: Ames test (OECD 471): negative

In vivo

Product: Micronucleus test (OECD 474) Oral (Mouse): negative

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: Category 2

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: NOEC (Brachydanio rerio, 96 h): 1.8 mg/l
LC 50 (Brachydanio rerio, 96 h): 1.8 - 3.2 mg/l
LC100 (Brachydanio rerio, 96 h): 3.2 mg/l

Aquatic Invertebrates

Product: EC 50 (Daphnia magna, 48 h): 0.21 mg/l

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: IC 50 (Desmodesmus subspicatus (green algae), 72 h): 0.48 mg/l
IC 50 (Desmodesmus subspicatus (green algae), 72 h): 0.23 mg/l
NOEC (Desmodesmus subspicatus (green algae)): 0.06 mg/l

Persistence and Degradability

Biodegradation

Product: 29 % (28 d, OECD 301 B)

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: Not applicable

Mobility in soil: No data available.

Other adverse effects: No further information available

13. Disposal considerations

Disposal methods:

The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority. Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method.

Contaminated Packaging:

Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. Rinse empty containers before disposal; recommended cleaning agent: water. Offer rinsed packaging material to local recycling facilities.

14. Transport information

Domestic regulation

49 CFR

Not regulated as a dangerous good

Remarks : Not regulated for transport within the U.S.A.

International Regulations

IATA-DGR

UN/ID No.	:	UN 3082
Proper shipping name	:	Environmentally hazardous substance, liquid, n.o.s. (3-chloro-2-hydroxypropylcocoalcyldimethylammoniumchloride)
Class	:	9
Packing group	:	III
Labels	:	9MI
Packing instruction (cargo aircraft)	:	964
Packing instruction (passenger aircraft)	:	964
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 3082
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-chloro-2-hydroxypropylcocoalcyldimethylammoniumchloride)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

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

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

US Federal Regulations

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

None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721, Subpt E)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Acute toxicity (any route of exposure), Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III) Section 312 Extremely Hazardous Substances Reporting Quantities (40 CFR 355, Appendix A)

Chemical Identity

Threshold Planning Quantity

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required

None present or none present in regulated quantities.

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

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health	3*
Flammability	0
Physical Hazards	0
PERSONAL PROTECTION	

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Issue Date: 07/29/2022

Version #: 1.1

Further Information: No data available.

Revision Information Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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