



Quench® Plus

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 08/12/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Quench® Plus

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Refined Technologies, Inc.
888-634-3183
P.O. Box 132196
The Woodlands, Texas 77393
T 888-634-3183
CSservice@r-t-i.com

1.4. Emergency telephone number

Emergency number : (800) 633-8253

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Oral) H302
Eye Dam. 1 H318
STOT SE 1 H370
Aquatic Chronic 2 H411

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Hazard statements (GHS US) :

: Danger
: H302 - Harmful if swallowed.
H318 - Causes serious eye damage.
H370 - Causes damage to organs.
H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements (GHS US) :
: P260 - Do not breathe mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, chemical goggles, & face protection.
P301+P312 - If swallowed: Call a doctor, a poison center if you feel unwell.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P307+P311 - If exposed: Call a poison center/doctor.
P310 - Immediately call poison center/doctor/...
P330 - Rinse mouth.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Sodium nitrite	(CAS-No.) 7632-00-0	7 - 13
1-Dodecanamine, N,N-dimethyl-, N-oxide	(CAS-No.) 1643-20-5	1 - 5

* In accordance with paragraph (i) of the OSHA Hazard Communication Standard (29 CFR §1910.1200), the specific chemical identity or exact weight % has been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures general : If exposed or concerned, get medical attention/advice. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use. Never give anything to an unconscious person.
- First-aid measures after inhalation : IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention. If breathing is difficult, supply oxygen. If breathing has stopped, give artificial respiration.
- First-aid measures after skin contact : IF ON SKIN (or clothing): Remove affected clothing and wash all exposed skin with water for at least 15 minutes. If irritation develops or persists, get medical attention immediately.
- First-aid measures after eye contact : IF IN EYES: Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Get medical attention immediately. Continue rinsing.
- First-aid measures after ingestion : IF SWALLOWED: rinse mouth thoroughly. Do not induce vomiting without advice from poison control center or medical professional. Get medical attention immediately.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects : Harmful if swallowed. Causes serious eye damage. Causes damage to organs (blood).
- Symptoms/effects after inhalation : May cause respiratory irritation.
- Symptoms/effects after skin contact : May cause skin irritation.
- Symptoms/effects after eye contact : Causes serious eye damage.
- Symptoms/effects after ingestion : Harmful if swallowed.
- Chronic symptoms : Causes damage to organs (blood).

4.3. Immediate medical attention and special treatment, if necessary

No additional information available.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Water spray. Carbon dioxide. Foam. Dry powder.
- Unsuitable extinguishing media : DO NOT USE dry chemicals containing ammonium phosphate.

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained cleaning personnel properly equipped with respiratory and eye protection.

6.1.1. For non-emergency personnel

- Protective equipment : Wear Protective equipment as described in Section 8.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Approved supplied-air respirator, in case of emergency. Wear suitable protective clothing, gloves and eye or face protection.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Keep away from sources of ignition - No smoking.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use. Store in a well-ventilated place.
- Incompatible materials : Cyanides, potassium, ammonia, oxidizing and reducing agents, organic materials, acids.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium nitrite (7632-00-0)		
OSHA	Remark (OSHA)	OELs not established
ACGIH	Remark (OSHA)	OELs not established
1-Dodecanamine, N,N-dimethyl-, N-oxide (1643-20-5)		
OSHA	Remark (OSHA)	OELs not established
ACGIH	Remark (OSHA)	OELs not established

8.2. Appropriate engineering controls

Appropriate engineering controls

: Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment with flammable materials. Ensure adequate ventilation, especially in confined areas.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment symbol(s):



Personal protective equipment:

Gloves. Protective eyewear. Protective clothing.

Hand protection:

Use gloves chemically resistant to this material when prolonged or repeated contact could occur. Gloves should be classified under Standard EN 374 or ASTM F1296. Suggested glove materials are: Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, PVC or vinyl.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where vapor, mist, or dust exceed PELs or other applicable OELs, use NIOSH (or other equivalent national standard) -approved dust/particulate respiratory protective equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear & Bright.
Color	: Slight yellow
Odor	: None
Odor threshold	: No data available
pH	: 8.5 – 9.5
Melting point	: No data available
Freezing point	: -10 °C (14 °F)
Boiling point	: Not measured
Flash point	: ≥ 93.3 °C (200 °F)
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: Not measured
Relative vapor density at 20°C	: No data available
Relative density	: 1.314 at 20 °C (68 °F)
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Cyanides, 1,3-Butadiene, urea and wood.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Sodium nitrite (7632-00-0)

LD50 oral rat 85 mg/kg
LC50 Inhalation - Rat 5.5 mg/l/4h

1-Dodecanamine, N,N-dimethyl-, N-oxide (1643-20-5)

LD50 dermal rat > 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))

Skin corrosion/irritation : Not classified [pH: 8.5 (8.5 – 9.5)]
Serious eye damage/irritation : Causes serious eye damage. [pH: 8.5 (8.5 – 9.5)]
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Causes damage to organs.
STOT-repeated exposure : Not classified

Sodium nitrite (7632-00-0)

NOAEL (subchronic, oral, animal/male, 90 days) 220 mg/kg bodyweight Animal: mouse, Animal sex: male
NOAEL (subchronic, oral, animal/female, 90 days) 165 mg/kg bodyweight Animal: mouse, Animal sex: female

1-Dodecanamine, N,N-dimethyl-, N-oxide (1643-20-5)

NOAEL (oral, rat, 90 days) 40 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:OPPTS 870.3650

Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Symptoms/effects : Harmful if swallowed. Causes serious eye damage. Causes damage to organs (blood).
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : May cause skin irritation.
Symptoms/effects after eye contact : Causes serious eye damage.
Symptoms/effects after ingestion : Harmful if swallowed.
Chronic symptoms : Causes damage to organs (blood).

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Sodium nitrite (7632-00-0)

LC50 fish 1 0.19 mg/l 96 Hr Oncorhynchus mykiss [flow-through] (juvenile)
LC50 fish 2 0.092 - 0.13 mg/l 96 Hr Oncorhynchus mykiss [flow-through]
EC50 crustacea 12.50 mg/l 48 hr, Daphnia magna
ErC50 algae 159.00 mg/l (72 hr), Tetraselmischuii

1-Dodecanamine, N,N-dimethyl-, N-oxide (1643-20-5)

LC50 fish 1 31.8 mg/l, 96h, Danio rerio
NOEC fish 1 0.495 mg/l; 15 days; Pimephales promelas
EC50 crustacea 3.9 mg/l 48h, Daphnia magna

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No data available

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SECTION 13: Disposal considerations

13.1. Disposal methods

- Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities.
No discharge to surface waters is allowed without an NPDES permit.
- Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

Department of Transportation (DOT)

NOT REGULATED per exception 49 CFR 171.4

Transportation of Dangerous Goods

NOT REGULATED per Special Provision 99

Transport by sea (IMDG)

- Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (sodium nitrite), 9, III, MARINE POLLUTANT
- UN-No. (IMDG) : 3082
- Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
- Class (IMDG) : 9 - Miscellaneous dangerous substances and articles
- Packing group (IMDG) : III - substances presenting low danger
- Limited quantities (IMDG) : 5 L
- Marine pollutant : Yes



Air transport (IATA)

- Transport document description (IATA) : UN 3082 Environmentally hazardous substance, liquid, n.o.s. (sodium nitrite), 9, III
- UN-No. (IATA) : 3082
- Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s.
- Class (IATA) : 9 - Miscellaneous Dangerous Substances and Articles
- Packing group (IATA) : III - Low danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Quench® Plus	
All chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") as of Feb. 2019 or are otherwise exempt.	
SARA Section 311/312 Hazard Classes	Health hazard - Acute toxicity (any route of exposure) Health hazard - Skin corrosion or Irritation Health hazard - Eye damage or Irritation

15.2. International regulations

No additional information available

15.3. US State regulations

This product does not contain any substances known to the state of California to cause cancer and/or reproductive harm

Component	State or local regulations
Sodium nitrite(7632-00-0)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Hydrogen peroxide(7722-84-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
Sodium phosphate dibasic(7558-79-4)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

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SECTION 16: Other information

Other information

: Date of Revision August 12, 2024
Revised by: Regulatory & Compliance

NFPA health hazard

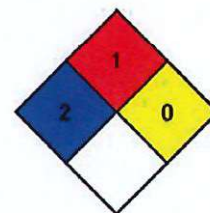
: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard

: 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



HMIS Hazard Rating

Health

: 2

Health

* - Chronic (long-term) health effects may result from repeated overexposure

Flammability

: 1

Physical

: 0

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.