



SAFETY DATA SHEET

Published Date
Mar-17-2025

Revision date
Mar-17-2025

Revision Number
1.1

1. IDENTIFICATION

Product identifier

Product Code(s) **QTRO-WHITE-V2**

Product category **Quatro Series**

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Industrial Printing Operations

Details of the supplier of the safety data sheet

M&R Printing Equipment
440 Medinah Rd
Roselle, IL 60172-2329

Emergency telephone number

Chemtrec: within USA and Canada: (800) 424-9300 Outside USA and Canada: +1 (703) 741-5970

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Signal word

None

Hazard statements

Hazards not otherwise classified (HNOC)

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%	Trade secret	Note
Deionized water	7732-18-5	30 - 60	*	
Glycerin	56-81-5	10 - 30	*	
Titanium Dioxide	13463-67-7	10 - 30	*	
Ethylene glycol	107-21-1	1 - 5	*	
Surfactant	Not Available	1 - 5	*	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Description of first aid measures

General Advice	Show this safety data sheet to the doctor in attendance.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.
Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed

None under normal use conditions.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO₂). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Special Provisions

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of the reach of children. Do not freeze.

Incompatible Products Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Chemical name	ACGIH TLV
Titanium Dioxide 13463-67-7	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter TWA: 2.5 mg/m ³ finescale respirable particulate matter
Ethylene glycol 107-21-1	TWA: 25 ppm vapor fraction STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only

Chemical name	OSHA PEL
Glycerin 56-81-5	TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction
Titanium Dioxide 13463-67-7	TWA: 15 mg/m ³ total dust

Chemical name	OSHA PEL (vacated)
Glycerin 56-81-5	TWA: 10 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction
Titanium Dioxide 13463-67-7	TWA: 10 mg/m ³ total dust
Ethylene glycol 107-21-1	Ceiling: 50 ppm Ceiling: 125 mg/m ³

Chemical name	Ontario TWAEV
Titanium Dioxide 13463-67-7	TWA: 10 mg/m ³
Ethylene glycol 107-21-1	TWA: 25 ppm vapor fraction STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only

Chemical name	Mexico OEL (TWA)
Glycerin 56-81-5	TWA/VLE-PPT: 10 mg/m ³ mist
Titanium Dioxide 13463-67-7	TWA/VLE-PPT: 10 mg/m ³
Ethylene glycol 107-21-1	Ceiling: 100 mg/m ³ aerosol

Appropriate engineering controls

Engineering Measures Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are

advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

- Eye/Face Protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur: Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the workstation location.
- Skin Protection** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
- Hand Protection** Chemical resistant protective gloves.
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding >480 minutes of permeation time): eg. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers. Taking into account the varying conditions, the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Due to different glove types, the manufacturer's directions for use should be observed. Replace gloves immediately when torn or any change in appearance is noticed such as dimension, color, flexibility.
- Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material.
- General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Appearance	Colored
Odor	No information available	Odor threshold	No information available
Property	Values	Remarks	Method
pH		No data available	
Melting point / freezing point	No information available	No data available	
Initial boiling point and boiling range	> 100 °C / 212 °F		
Flash point	> 94 °C / > 201 °F	No data available	
Evaporation rate		No data available	
Flammability Limit in Air			
Upper flammability or explosive limits		No data available	
Lower flammability or explosive limits		No data available	
Vapor pressure		No data available	
Relative vapor density		No data available	
Specific gravity - VALUE 1	1.15		
Water Solubility		No data available	
Solubility in other solvents		No data available	
Partition coefficient		No data available	

Autoignition temperature No information available No data available
Hyphen No data available
Kinematic viscosity No data available
Dynamic viscosity No data available

Explosive Properties No data available
Oxidizing Properties No data available

Other information

Photochemically Reactive No
Weight Per Gallon (lbs/gal) 9.6

VOC by weight % (less water) 8.53	VOC by volume % (less water) No information available	VOC lbs/gal (less water) 0-1	VOC grams/liter (less water) 98.12
Volatile by weight % (including Water) 59.83	Water by weight % 56.89		

10. STABILITY AND REACTIVITY

Reactivity
 No information available.

Chemical stability
 Stable under normal conditions.

Possibility of hazardous reactions
 None under normal processing.

Conditions to avoid
 Keep away from open flames, hot surfaces and sources of ignition. Do not freeze.

Incompatible materials
 Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

Hazardous decomposition products
 Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO2). Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Specific test data for the substance or mixture is not available.
Eye Contact Specific test data for the substance or mixture is not available.
Skin Contact Specific test data for the substance or mixture is not available.
Ingestion Specific test data for the substance or mixture is not available.

Chemical name	Oral LD50
Deionized water 7732-18-5	> 90 mL/kg (Rat)
Glycerin 56-81-5	= 12600 mg/kg (Rat)
Titanium Dioxide 13463-67-7	> 10000 mg/kg (Rat)
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)

Chemical name	Dermal LD50
Glycerin 56-81-5	> 10 g/kg (Rabbit)
Ethylene glycol 107-21-1	= 10600 mg/kg (Rat)

Chemical name	Inhalation LC50
Glycerin 56-81-5	> 2.75 mg/L (Rat) 4 h
Titanium Dioxide 13463-67-7	= 5.09 mg/L (Rat) 4 h
Ethylene glycol 107-21-1	> 2.5 mg/L (Rat) 6 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Specific test data for the substance or mixture is not available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Specific test data for the substance or mixture is not available.
Eye damage/irritation Specific test data for the substance or mixture is not available.
Irritation Specific test data for the substance or mixture is not available.
Corrosivity Specific test data for the substance or mixture is not available.
Sensitization Specific test data for the substance or mixture is not available.
Mutagenic Effects Specific test data for the substance or mixture is not available.
Carcinogenic effects Specific test data for the substance or mixture is not available.
Reproductive Effects Specific test data for the substance or mixture is not available.
STOT - single exposure Specific test data for the substance or mixture is not available.
STOT - repeated exposure Specific test data for the substance or mixture is not available.
Chronic Toxicity Specific test data for the substance or mixture is not available.
Aspiration hazard Specific test data for the substance or mixture is not available.
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH
Titanium Dioxide 13463-67-7	A3

Chemical name	IARC
Titanium Dioxide 13463-67-7	Group 2B

Chemical name	OSHA
Titanium Dioxide 13463-67-7	X

Numerical measures of toxicity - Product Information

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

- ATEmix (oral) 17,539.20
- ATEmix (dermal) 99,999.00
- ATEmix (inhalation-gas) 99,999.00
- ATEmix (inhalation-dust/mist) 99,999.00
- ATEmix (inhalation-vapor) 99,999.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

Specific test data for the substance or mixture is not available.

23.61 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Algae/aquatic plants
Ethylene glycol 107-21-1	96h EC50 Pseudokirchneriella subcapitata: 6500 - 13000 mg/L

Chemical name	Fish
Glycerin 56-81-5	96h LC50 Oncorhynchus mykiss: 51 - 57 mL/L (static)
Ethylene glycol 107-21-1	96h LC50 Oncorhynchus mykiss: = 41000 mg/L 96h LC50 Oncorhynchus mykiss: 14 - 18 mL/L (static) 96h LC50 Lepomis macrochirus: = 27540 mg/L (static) 96h LC50 Oncorhynchus mykiss: = 40761 mg/L (static) 96h LC50 Pimephales promelas: 40000 - 60000 mg/L (static) 96h LC50 Poecilia reticulata: = 16000 mg/L (static)

Chemical name	Crustacea
Ethylene glycol 107-21-1	48h EC50 Daphnia magna: = 46300 mg/L

Persistence and degradability

No information available.

Bioaccumulation

Chemical name	Partition coefficient
Glycerin 56-81-5	-1.76
Ethylene glycol 107-21-1	-1.93

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste Disposal Methods

Contain and dispose of waste according to local regulations.

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

Note:

This information is not intended to convey all specific transportation requirements relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation information can be found in the specific regulations for your mode of transportation. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

DOT

Not regulated

ICAO / IATA / IMDG / IMO

Not Regulated

15. REGULATORY INFORMATION

International Inventories

All substances are listed as ACTIVE on the TSCA Inventory. For further information, please contact: Supplier (manufacturer/importer/downstream user/distributor).

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
Ethylene glycol	107-21-1	1 - 5	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:

Chemical name	CAS No.	Weight-%
Ethylene glycol	107-21-1	1 - 5

US State Regulations

Chemical name	Massachusetts
Glycerin 56-81-5	X
Titanium Dioxide 13463-67-7	X
Ethylene glycol 107-21-1	X

Chemical name	Minnesota Right To Know
Glycerin 56-81-5	X
Titanium Dioxide 13463-67-7	X
Ethylene glycol 107-21-1	X

Chemical name	New Jersey
Glycerin 56-81-5	X
Titanium Dioxide 13463-67-7	X
Ethylene glycol 107-21-1	X

Chemical name	Pennsylvania
Deionized water 7732-18-5	X
Glycerin 56-81-5	X
Titanium Dioxide 13463-67-7	X
Ethylene glycol 107-21-1	X

California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm

Chemical name	California Proposition 65
Titanium Dioxide	Carcinogen
Ethylene glycol	Developmental

This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product.

Canada

Chemical name	NPRI - National Pollutant Release Inventory
Ethylene glycol 107-21-1	Part 1, Group A Substance Part 4 Substance - Criteria Air Contaminants

16. OTHER INFORMATION

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

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation
+	Sensitizers		

ACGIH: (American Conference of Governmental Industrial Hygienists)

- A1 - Known Human Carcinogen
- A2 - Suspected Human Carcinogen
- A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

- Group 1 - Carcinogenic to Humans
- Group 2A - Probably Carcinogenic to Humans
- Group 2B - Possibly Carcinogenic to Humans
- Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP: (National Toxicity Program)

- Known - Known Carcinogen
- Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

- X - Present

Revision date Mar-17-2025

Pursuant to NOM-018-STPS-2015

This information within is considered correct but is not exhaustive and will be used for guidance only, which is based on the current knowledge of the substance or mixture and is applicable to the appropriate safety precautions for the product.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its 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.

End of Safety Data Sheet