



# SAFETY DATA SHEET

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## 1. IDENTIFICATION

### Product identifier

Product code                    **QTRO-WHITE-1**  
Product name                   **White**  
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  
(800) 736-6431

### 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	60 - 80	*	
Resin	Not Available	10 - 30	*	

Glycerin	56-81-5	10 - 30	*	
Titanium Dioxide	13463-67-7	5 - 10	*	
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.

**Specific Hazards Arising from the Chemical**

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 <sup>3</sup> nanoscale respirable particulate matter TWA: 2.5 mg/m <sup>3</sup> finescale respirable particulate matter
Ethylene glycol 107-21-1	TWA: 25 ppm vapor fraction STEL: 50 ppm vapor fraction STEL: 10 mg/m <sup>3</sup> inhalable particulate matter, aerosol only

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

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

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

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

<b>Physical state</b>	Liquid	<b>Appearance</b>	Colored
<b>Odor</b>	No information available	<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No data available
Melting Point / Freezing Point	No information available	No data available
Boiling Point / 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 limit		No data available
Lower flammability limit		No data available
Vapor Pressure		No data available
Vapor Density		No data available
Specific Gravity	1.1	
Water Solubility		No data available

Solubility in other solvents No data available  
 Partition coefficient: n-octanol/water No data available  
 Autoignition Temperature No information 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) 9.18

VOC by weight % (less water)	VOC by volume % (less water)	VOC lbs/gal (less water)	VOC grams/liter (less water)
8.94	No information available	0-1	98.38
Volatile by weight % (including Water)	Water by weight %		
66.84	64.22		

**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 )
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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

<b>ATEmix (oral)</b>	20,099.90
<b>ATEmix (dermal)</b>	99,999.00
<b>ATEmix (inhalation-gas)</b>	99,999.00
<b>ATEmix (inhalation-dust/mist)</b>	99,999.00
<b>ATEmix (inhalation-vapor)</b>	99,999.00

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

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

0 % 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**

**Waste treatment 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).

**U.S. 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	X



107-21-1	
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**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

**Canada**

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

**16. OTHER INFORMATION**

<b>HMIS</b>	<b>Health hazards</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Personal Protection</b>
	1	1	0	X

**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

**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** Aug-31-2023

**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**