Issue Date: 01.07.2024

MATERIAL SAFETY DATA SHEET

QATOL Q-TEC BRAKE FLUID DOT 4

PRODUCT AND COMPANY IDENTIFICATION:

Product Name: (QATOL Q-TEC BRAKE FLUID DOT 4
Type your product name)
Use of the substance/Mixture:

Company Identification:

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COMPOSITION / INFORMATION ON IGREDIENTS:

Substance/Mixture: Mixture

Ingredients:

Product/ingredient name	CAS no.	Concentration (%)
Triethylene Glycol Monomethyl Ether Triethylene Glycol Monoethyl Ether Triethylene Glycol Monobutyl Ether Tetrathylene Glycol Monobutyl Ether Polyethylene Glycol Diethylene Glycol Monobutyl Ether		

Diethylene Glycol Diethylene Glycol Monomethyl Ether Diethylene Glycol Monoethyl Ether Polyalkylene Glycol Monobutyl Ether Polyalkylene Glycol Monomethyl Ether Polyalkylene Glycols 9038-95-3		

HAZARD IDENTIFICATION:

OSHA Hazards: Target Organ Effect, Harmful by ingestion, Irritant, Teratogen, Reproductive hazard

Target Organs: Kidney, Liver, Central nervous system, Female reproductive system, Male reproductive system, Blood.

GHS Classification:

Acute toxicity, dermal (Category 5) Acute toxicity, oral (Category 4) Skin Irritation (Category 3)

Serious eye damage (Category 1) Reproductive toxicity (Category 2)

Signal Word: WARNING Hazard Statements:

H302 Harmful if swallowed

H313 May be harmful in contact with skin

H316 Causes mild skin irritation

H318 Causes serious eye damage

H361 Suspected of damaging fertility or the unborn child

Precautionary Statements:

P201 Obtain special instructions before use.

P202 Do not handle until all safety instructions have been read and understood.

P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear eye protection / face protection.
P301 +P312 IF SWALLOWED: Call a POISON CENTER or doctor / physician immediately.
P330 IF SWALLOWED: Rinse mouth.
P312 IF ON SKIN: Call a POISON CENTER or doctor / physician if you feel unwell.
P332 + P313 If skin irritation occurs: Get medical advise / attention.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310 IF IN EYES: Immediately call a POISON CENTER or doctor / physician.
P308 + P313 If exposed or concerned: Get medical advice / attention.

20-80% of the mixture consists of ingredients of unknown acute toxicity.

HMIS Classification
Health hazard: 1
Chronic Health Hazard
Flammability1
Physical hazards 0

NFPA Rating
Health hazard:

1
Fire: 1
Reactivity 0

Description of Any Other Hazards Not Otherwise Classified: none known.

FIRST-AID MEASURES:

Skin: First aid is normally required. Immediately remove all soiled or stained clothing. Wash the affected area immediately and repeatedly with soap and water.

Eye: Keep eyes open and rinse immediately and repeatedly with water for at least 15 minutes.

Inhalation (Breathing): First aid is normally required. Inhalation of heavy concentrations of vapors, fumes or spray, may cause mild irritation of the throat. If breathing difficulties develop, move victim away from source of exposure and into fresh air, keep warm and allow to rest. Seek immediate medical attention.

Ingestion (Swallowing): First aid is normally required. Possible risk of vomiting and diarrhea. Do not induce vomiting to avoid the risk of aspiration into the respiratory tract. Give nothing to drink. however, if swallowed and symptoms develop, seek medical attention.

aspiration: If the product is believed to have entered the lungs (in case of vomiting, for example), take the person to hospital for immediate care.

FIRE-FIGHTING MEASURES:

Extinguishing Media: Dry chemical, carbon dioxide, foam, or water spray is recommended. Water or foam may cause frothing of materials heated above 212°F. Carbon dioxide can dis-place oxygen. Use caution when applying carbon dioxide in confined spaces.

Fire Fighting Instructions: For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is un-known, in enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant.

Isolate immediate hazard area, keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk.

Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

ACCIDENTAL RELEASE MEASURES:

This material may burn, but will not ignite readily. Keep all sources of ignition away from spill/release. Stay upwind and away from spill/release. Notify persons downwind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant.

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems, and natural waterways. Dike far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate absorbent material.

Notify fire authorities and appropriate federal, state, and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines.

HANDING AND STORAGE:

Handling: "Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death.

"Empty" drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioned. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Storage: Keep container(s) tightly closed. Use and store this material in cool, dry, well-ventilated areas away from heat and all sources of ignition. Store only in approved containers. Keep away from any incompatible material. Protect container(s) against physical damage.

Ventilation: Normal ventilation is adequate.

EXPOSURE CONTROLS/PERSONAL PROTECTION:

Engineering Measures: If current ventilation practices are not adequate to maintain air-borne concentrations below the established exposure limits (see Section 2), additional engineer-ing controls may be required.

Personal Protection Equipment:

Respiratory- A NIOSH certified air purifying respirator with a Type 95 (R or P) particulate filter may be used under Protection provided by air purifying respirators is limited. Use a NIOSH approved self-contained breathing apparatus (SCBA) or equivalent operated in a pres-sure demand or other positive pressure mode if there is potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection. A respiratory protection

Skin: The use of gloves impervious to the specific material handled is advised to prevent skin contact and possible irritation (see manufacturers literature for

information on permeability). Examples of approved materials are nitrile and neoprene.

Eye/Face: While contact with this material is not expected to cause irritation, the use of ap-proved eye protection to safeguard against potential eye contact is considered good practice.

Other Protective Equipment: A source of clean water should be available in the work area for flushing eyes and skin. Impervious clothing should be worn as needed.

PHYSICAL AND CHEMICAL PROPERTIES:

PHYSICAL STATE: Liquid
APPEARANCE AND COLOR: Yellow to amber
ODOR: Mild
FLASH POINT: >275°F (>135°C)
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: not available

AUTO IGNITION TEMPERATURE: not available DECOMPOSITION TEMPERATURE: not available VAPOR PRESSURE: not available
ODOR THRESHOLD: not available
VAPOR DENSITY (air = 1): >1
pH: 10.0 – 11.5
RELATIVE DENSITY: 8.33 – 9.02 lb/gal
SPECIFIC GRAVITY (H2O = 1 AT 4 C): 1.000 – 1.070
MELTING POINT / FREEZING POINT: not available
WATER SOLUBILITY: soluble
OTHER SOLUBILITIES: not available
INITIAL BOILING POINT AND BOILING RANGE: 480°F (248.9°C), boiling range not available
EVAPORATION RATE (BuAc = 1): <0.01
PARTITION COEFFICIENT: n-OCTANOL/WATER: not available

STABILITY AND REACTIVITY:

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility with Other Materials: May react with strong acids or strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: none

Hazardous Polymerization: Hazardous polymerization will not occur.

TOXICOLOGICAL INFORMATION:

SIGNS AND SYMPTOMS OF OVEREXPOSURE: Swallowing larger amounts may cause nausea and vomiting, abdominal discomfort or diarrhea. May cause dizziness and drowsiness.

ACUTE EFFECTS:

EYE CONTACT: May cause slight eye irritation. May cause slight corneal injury.

SKIN CONTACT: Brief contact is essentially nonirritating to skin.

INHALATION: At room temperature, exposure to vapor is minimal due to low volatility. Mist may cause irritation of the upper respiratory tract.

INGESTION: Toxic or fatal if ingested. For diethylene glycol, a component of this mixture, a lethal dose can be as little as two ounces. Symptoms of diethylene glycol poisoning include severe abdominal cramping, diarrhea, vomiting, sweating, confusion, cardiac abnormalities, neurological abnormalities, infrequent urination, intoxication or CNS depression. If left untreated, product will metabolize to cause metabolic acidosis, renal failure, hyperkalemia, hyponatremia, paralysis, cardiac failure or death. Seek medical attention immediately for poisoning. If ingested, DO NOT wait for symptoms to develop before getting treatment.

TARGET ORGAN EFFECTS: Product is toxic to kidneys, liver, central nervous system and heart. Metabolic products of diethylene glycol produce acidosis and organ toxicity effects.

CHRONIC EFFECTS: May cause dryness or defatting of the skin, dermatitis, or may aggravate existing skin conditions.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Various skin conditions.

Lubricant oil do NOT contain any ingredients identified as carcinogenic by IARC, NTP, or OSHA.

Lubricating oils are not known to contain any chemicals on the SARA Section 313 list at a concentration greater than 1.0 percent or carcinogenic chemical on that list at a concentration greater than 0.1 percent.

For brake fluid following toxicological informations to be noted

ACUTE TOXICITY VALUES

Triethylene Glycol Monomethyl Ether ORAL LD50 (rat): 11,842 mg/kg

DERMAL LD50 (rabbit): 7,441 mg/kg

INHALATION LC50 (state animal): data unavailable

Triethylene Glycol Monoethyl Ether

ORAL LD50 (state animal): data unavailable DERMAL LD50 (state animal): data unavailable INHALATION LC50 (state animal): data unavailable

Tetraethylene Glycol Monobutyl Ether ORAL LD50 (rat): 5,300 mg/kg DERMAL LD50 (rabbit): 3,505 mg/kg

INHALATION LC50 (state animal): data unavailable

Polyethylene Glycol

ORAL LD50 (state animal): data unavailable DERMAL LD50 (state animal): data unavailable INHALATION LC50 (state animal): data unavailable

Diethylene Glycol Monobutyl Ether ORAL LD50 (rat): 5,660 mg/kg

DERMAL LD50 (rabbit): 2,700 mg/kg

INHALATION LC50 (state animal): data unavailable

Diethylene Glycol

ORAL LD50 (rat): 12,565 mg/kg

DERMAL LD50 (rabbit): 11,890 mg/kg

INHALATION LC50 (state animal): data unavailable

Diethylene Glycol Monomethyl Ether ORAL LD50 (rat): >7,000 mg/kg

DERMAL LD50 (rabbit): >20,400 mg/kg

INHALATION LC50 (state animal): data unavailable

Diethylene Glycol Monoethyl Ether ORAL LD50 (rat): 10,502 mg/kg

DERMAL LD50 (rabbit): 9,143 mg/kg

INHALATION LC50 (state animal): data unavailable

Polyalkylene Glycol Monobutyl Ether ORAL LD50 (rat): >2,000 mg/kg DERMAL LD50 (rat): >2,000 mg/kg

INHALATION LC50 (state animal): data unavailable

Polyalkylene Glycol Monomethyl Ether

ORAL LD50 (state animal): data unavailable DERMAL LD50 (state animal): data unavailable INHALATION LC50 (state animal): data unavailable

Polyalkylene Glycols

ORAL LD50 (state animal): data unavailable DERMAL LD50 (state animal): data unavailable INHALATION LC50 (state animal): data unavailable

LISTED CARCINOGEN:

NATIONAL TOXICOLOGY PROGRAM REPORT ON CARCINOGENS: No component

of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC LISTED AS POTENTIAL CARCINOGEN: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA LISTED AS POTENTIAL CARCINOGEN: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

ECOLOGICAL INFORMATION:

ECOTOXICITY
This material is not expected to be harmful to aquatic organisms.
ENVIRONMENTAL FATE
This material is not expected to be readily biodegradable.

DISPOSAL CONSIDERATIONS:

Use material for its intended purpose or recycle if possible. Oil collection services are available for used oil recycling or disposal. Place contaminated materials in containers and dispose of in a

manner consistent with applicable regulations. Contact your sales representative or local environmental or health authorities for approved disposal or recycling methods.

TRANSPORT INFORMATION:

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate

Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode specific or quantity-specific shipping requirements.

DOT Shipping Description: PETROLEUM LUBRICATING OIL, NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

Additional Information:

NOT HAZARDOUS BY U.S. DOT. ADR/RID HAZARD CLASS NOT APPLICABLE.

IMO/IMDG Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER THE IMDG CODE

ICAO/IATA Shipping Description: PETROLEUM LUBRICATING OIL; NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORT UNDER ICAO

REGULATORY INFORMATION:

EPCRA 311/312 CATEGORIES:

1. Immediate (Acute) Health Effects: YES
2. Delayed (Chronic) Health Effects: YES
3. Fire Hazard: YES
4. Sudden Release of Pressure Hazard: NO

5. Reactivity Hazard: NO

OTHER INFORMATION:

Revision No; Rev-00
Risk Phases in Full: Not classified
REGULATORY LISTS SEARCHED:

01-1	=IARC Group 1	03=EPCRA 313	07=PA RTK
01-2A	=IARC Group 2A	04=CA Proposition 65	
01-2B	=IARC Group 2B	05=MA RTK	
02	=NTP Carcinogen	06=NJ RTK	

No components of this material were found on the regulatory lists above.

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV	-	Threshold Limit Value
TWA	-	Time Weighted Average
STEL	-	Short-term Exposure Limit
PEL	-	Permissible Exposure Limit
CAS	-	Chemical Abstract Service Number
ACGIH	-	American Conference of Government Industrial Hygienists
IMO/IMDG Code	-	International Maritime Dangerous Goods
API	-	American Petroleum Institute
MSDS	-	Material Safety Data Sheet
NFPA	-	National Fire Protection Association (USA)
DOT	-	Department of Transportation (USA)
NTP	-	National Toxicology Program (USA)
IARC	-	International Agency for Research on Cancer
OSHA	-	Occupational Safety and Health Administration.

The Information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief. The information given is designed only as 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 is not valid for such material used in combination with any other material ore in any process, unless specified in the text.