SAFETY DATA SHEET

QUAKERTEK™ VERKOMAX R-1000

SDS according to ABNT NBR 14725:2023

Section 1. Identification

Product code : 048282-01

Product name : QUAKERTEK™ VERKOMAX R-1000

Other means of identification : Not available.

Relevant identified uses of the substance or mixture and uses advised against

Relevant uses : Lubricating grease

Uses advised against : Any other purpose. Not intended for human consumption.

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Section 2. Hazards identification

This product is classified as hazardous according to ABNT NBR 14725.

Classification of the substance or mixture : SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
AQUATIC HAZARD (ACUTE) - Category 3

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H402 - Harmful to aquatic life.

Precautionary statements

Prevention : P280 - Wear protective gloves. Wear eye or face protection.
P273 - Avoid release to the environment.
P264 - Wash thoroughly after handling.

Section 2. Hazards identification

Response : P302 + P352 - IF ON SKIN: Wash with plenty of water.
P362 + P364 - Take off contaminated clothing and wash it before reuse.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Mineral oil **	≥50 - ≤75	-
Mineral oil	≤10	-
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	≤2.2	4259-15-8
Benzenesulfonic acid, C10-16-alkyl derivs.	≤2.1	68584-22-5
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	≤1	68411-46-1

**** May contain** : 64742-01-4, 64742-57-0, 64742-62-7

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4. First aid measures

Description of necessary first aid measures

General advice : Get medical attention. If medical advice is needed, have product container or label at hand. Use personal protective equipment as required. Remove contaminated clothing and wash it before reuse. Wash skin surfaces thoroughly after contact.

Inhalation : Move affected person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.

Skin contact : Brush off loose particles from skin. Wash with plenty of soap and water. Remove contaminated clothing and wash it before reuse. Get medical attention if symptoms occur.

Eye contact : Flush with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do. Get medical attention if symptoms occur.

Ingestion : Ingestion may cause gastrointestinal irritation and diarrhea. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed

Inhalation : Not expected under normal use.

Skin contact : pain or irritation,redness

Eye contact : pain or irritation,redness,watering

Ingestion : Not expected under normal use.

Indication of immediate medical attention and special treatment needed, if necessary

Section 4. First aid measures

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Use personal protective equipment as required.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire. Use dry chemical, CO_2, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Hazardous thermal decomposition products

Hazardous thermal decomposition products : In a fire, hazardous decomposition products may be produced. Hydrogen fluoride (HF). Fluorophasgene fluorinated compounds carbon oxides (CO, CO_2) sulfur oxides phosphorus oxides metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Put on appropriate personal protective equipment (see Section 8). Keep unnecessary personnel away. Avoid breathing vapor or mist. Provide adequate ventilation.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". Evacuate area.

Environmental precautions : May be harmful to the environment if released in large quantities. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Do not allow any potentially contaminated water, including rain water, runoff from fire fighting or spills, to enter any waterway, sewer or drain.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Absorb with an inert material and place in an appropriate waste disposal container. Place spilled material in a designated, labeled waste container. Using a vacuum with HEPA filter will reduce dust dispersal. Avoid dust generation. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill : Stop leak if without risk. Move containers from spill area. For large spills, dike spilled material or otherwise contain it to ensure runoff does not reach a waterway. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not breathe dust. Do not ingest.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Mineral oil **	**ACGIH TLV (United States)** STEL 15 minutes: 10 mg/m³. TWA 8 hours: 5 mg/m³.
Mineral oil	**ACGIH TLV (United States)** STEL 15 minutes: 10 mg/m³. TWA 8 hours: 5 mg/m³.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. Keep equipment clean.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Section 8. Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

nitrile rubber	Glove Thickness : ≥0.38 mm	Break through time : ≥ 480 minutes
butyl rubber	Glove Thickness : ≥0.64 mm	Break through time : ≥ 480 minutes

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Always ensure that gloves are free from defects and that they are stored and used correctly. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Other skin protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : A respirator is not needed under normal and intended conditions of product use. Use appropriate respiratory protection if there is a risk of exceeding any exposure limits.

Thermal hazards : Not expected under normal use. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Paste.]

Color : Red.

Odor : Not available.

Odor threshold : Not available.

pH : Not applicable.

Melting point : Not applicable.

Boiling point : >100°C (>212°F)

Flash point : Not applicable.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not applicable.

Vapor pressure : Not available.

Vapor density : Not applicable.

Density : 0.9251 g/cm³ [25°C]

Solubility :

Media	Result
water	Not soluble

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not applicable.

Decomposition temperature : Not available.

Viscosity : Kinematic (40°C (104°F)): >20.5 mm^2/s (>20.5 cSt)

Flow time (ISO 2431) : Not available.

Section 9. Physical and chemical properties

Median particle size : Not available.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products. Keep away from flames or sparks.

Incompatible materials : strong acids. strong alkalis. Incompatible with alkali metals.. Metal powder.

Hazardous decomposition products : Hazardous decomposition may occur. Decomposition products may include the following materials: Hydrogen fluoride (HF). Fluorophasgene fluorinated compounds

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Route	ATE value
Oral	43950.54 mg/kg

Numerical measures of toxicity

Product/ingredient name	Result	
zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	Rabbit - Dermal - LD50	>5 g/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Skin After topical exposure - Primary irritation
	Rat - Oral - LD50	3.1 g/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Food intake (animal) Gastrointestinal - Hypermotility, diarrhea
Benzenesulfonic acid, C10-16-alkyl derivs.	Rabbit - Dermal - LD50	2000 mg/kg Toxic effects: Skin After topical exposure - Primary irritation
	Rat - Oral - LD50	775 mg/kg Toxic effects: Lung, Thorax, or Respiration - Other changes Liver - Other changes Kidney, Ureter, and Bladder - Other changes
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	Rat - Oral - LD50	>2000 mg/kg

Section 11. Toxicological information

	Rabbit - Dermal - LD50	>2000 mg/kg

Irritation/Corrosion : Causes severe eye irritation. Causes skin irritation.

Respiratory or skin sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Reproductive toxicity : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

Name	Result
Mineral oil	ASPIRATION HAZARD - Category 1

Other information : None identified.

Information on the likely routes of exposure

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Eye contact : Causes serious eye irritation.

Ingestion : No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure

None identified.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Not expected under normal use.

Skin contact : pain or irritation,redness

Eye contact : pain or irritation,redness,watering

Ingestion : Not expected under normal use.

Section 12. Ecological information

This material is harmful to aquatic life.

Toxicity

Product/ingredient name	Result	
zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	Acute - EC50	240 mg/l [72 hours] Algae - *Desmodesmus subspicatus*
	Acute - LC50	1 to 5 mg/l [96 hours] Fish - *Pimephales promelas*
Benzenesulfonic acid, C10-16-alkyl derivs.	Acute - EC50 - Fresh water	5.65 mg/l [48 hours] Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate

Persistence/degradability

Section 12. Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
zinc bis[O,O-bis (2-ethylhexyl)] bis (dithiophosphate)	-	-	Not readily
Benzenesulfonic acid, C10-16-alkyl derivs.	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
zinc bis[O,O-bis (2-ethylhexyl)] bis (dithiophosphate)	3.59	-	Low
Benzenesulfonic acid, C10-16-alkyl derivs.	22.12	-	High
Benzenamine, N-phenyl-, reaction products with 2,4,4-trimethylpentene	5.1	1730	High

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Empty containers or liners may retain some product residues. Empty containers retain product residue and can be hazardous. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

Section 14. Transport information

	Land transportation	Maritime transportation	Air transportation
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

Land transportation : Resolution nº 5.998/2022 of the National Land Transport Agency (ANTT), Updates the Regulation of the Land Transport of Dangerous Goods and Approves the Supplementary Instructions, and other provisions.

Section 14. Transport information

Maritime transportation : DPC – Directorate of ports and coasts (transport in Brazilian waters)
NORMAM 01/DPC – Vessels Employed in navigation at sea
NORMAM 02/DPC – Vessels employed in inland navigation
IMO – International Maritime Organization
IMDG – International Maritime Dangerous Goods

Air transportation : ANAC – National Agency of Civil Aviation – Resolution No. 129 of December 8, 2009
RBAC N°175 – (Brazilian Civil Aviation Regulation Regulation) – Transport of Dangerous Articles in Civil Aircraft
IS N° 175-001-SUPPLEMENTAL STATEMENT-IS
ICAO – International Civil Aviation Organization (International Civil Aviation Organization) – Doc 9284-NA/905
IATA – International Air Transport Association - Dangerous Goods Regulation (DGR)

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Specific regulations of safety, health and environment of the product

Law No. 12.305, of August 2, 2010 (National Policy on Solid Waste)

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Section 16. Other information

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Prepared by : **Quaker Houghton Product Stewardship**

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group

Section 16. Other information

UN = United Nations
VOC = Volatile Organic Compound
IARC = International Agency for Research on Cancer.

References : **Safety data sheets of raw materials, global regulatory body information, scientific literature, and testing data .**

Indicates information that has changed from previously issued version.

Notice to reader

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