

# SAFETY DATA SHEET

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## 1. COMPANY AND PRODUCT IDENTIFICATION

### Product identifier

**Product Name:** VISCOTECH R400  
**Product code:** 016344-01

### Other means of identification

**Synonyms** No information available

### Application

**Recommended Use** Not determined  
**Uses advised against** For industrial use only

### Supplier/Manufacturer:

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                   |            |
|-----------------------------------|------------|
| Serious eye damage/eye irritation | Category 1 |
| Skin Sensitization                | Category 1 |
| Chronic aquatic toxicity          | Category 3 |

### Label Elements

#### Emergency Overview

**DANGER**

#### **Hazard Statements**

Causes serious eye damage  
May cause an allergic skin reaction  
Harmful to aquatic life with long lasting effects



**Appearance** Tan

**Physical State** Semi-Solid

**Odor** Mild Petroleum

#### **Precautionary Statements - Prevention**

Wear protective gloves/protective clothing/eye protection/face protection

Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Avoid release to the environment

#### Precautionary Statements - Response

Specific treatment (see First Aid on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a POISON CENTER or doctor/physician

IF ON SKIN: Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

None known

#### Other Information

Causes mild skin irritation. Harmful to aquatic life.

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

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Components                                                      | CAS No     | Weight % |
|-----------------------------------------------------------------|------------|----------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | 68649-42-3 | 1 - 5%   |
| Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates | 80939-62-4 | 1 - 5%   |
| zinc bis(dibutylidithiocarbamate)                               | 136-23-2   | <1%      |

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

### 4. FIRST AID MEASURES

|                                                  |                                                                                                                                                                                                               |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General advice:</b>                           | Show this safety data sheet to the doctor in attendance Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash off with soap and water. If symptoms persist, call a physician |
| <b>Eye contact:</b>                              | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes                                                                                                                       |
| <b>Skin contact:</b>                             | Remove and wash contaminated clothing before re-use. Wash off immediately with soap and plenty of water.                                                                                                      |
| <b>Ingestion:</b>                                | If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person                          |
| <b>Inhalation:</b>                               | Move to fresh air in case of accidental inhalation of vapors. If not breathing, give artificial respiration If breathing is difficult, give oxygen Consult a physician.                                       |
| <b>Note to physician:</b>                        | Treat symptomatically.                                                                                                                                                                                        |
| <b>Medical condition aggravated by exposure:</b> | None known.                                                                                                                                                                                                   |

## 5. FIRE-FIGHTING MEASURES

|                                                        |                                                                                                                                       |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media:</b>                   | Use dry chemical, CO <sub>2</sub> , water spray or `alcohol` foam.                                                                    |
| <b>Specific hazards:</b>                               | Do not allow material to contaminate ground water system.                                                                             |
| <b>Special protective equipment for fire-fighters:</b> | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear |
| <b>Specific methods:</b>                               | Water mist may be used to cool closed containers                                                                                      |

## 6. ACCIDENTAL RELEASE MEASURES

|                                   |                                                                                                                                                                         |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions:</b>      | Ensure adequate ventilation. Do not breathe vapour/dust. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. |
| <b>Environmental precautions:</b> | Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.                                                         |
| <b>Methods for cleaning up:</b>   | Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.       |

## 7. HANDLING AND STORAGE

### Handling

|                                        |                                                                                                                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Technical measures/precautions:</b> | Provide sufficient air exchange and/or exhaust in work rooms.                                                                                                                                                        |
| <b>Safe handling advice:</b>           | In case of insufficient ventilation, wear suitable respiratory equipment. Do not breathe vapors or spray mist. Wear personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling. |

### Storage

|                                               |                                                      |
|-----------------------------------------------|------------------------------------------------------|
| <b>Technical measures/storage conditions:</b> | Store at room temperature in the original container. |
| <b>Incompatible products:</b>                 | Strong oxidizing agents                              |
| <b>Safe storage temperature:</b>              | 40 - 100 ° F                                         |
| <b>Shelf life:</b>                            | 36 months                                            |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

| Components   | ACGIH Exposure Limits | OSHA TWA (final)   | NIOSH - Pocket Guide |
|--------------|-----------------------|--------------------|----------------------|
| Mineral Oil* | 5 mg/m <sup>3</sup>   | 5mg/m <sup>3</sup> | 5mg/m <sup>3</sup>   |

|                              |                             |
|------------------------------|-----------------------------|
| <b>Engineering measures:</b> | Ensure adequate ventilation |
|------------------------------|-----------------------------|

### Personal Protective Equipment:

- General:** Eye Wash and Safety Shower
- Respiratory protection:** If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, a NIOSH-certified respirator with organic vapor/P100 filter should be worn.
- Eye protection:** Safety glasses with side-shields
- Hand protection:** Neoprene gloves
- Skin and body protection:** Long sleeved clothing
- Hygiene measures:** Avoid contact with skin, eyes and clothing.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                      |                          |
|--------------------------------------|--------------------------|
| <b>Physical State</b>                | Semi-Solid               |
| <b>Appearance</b>                    | Tan                      |
| <b>Odor</b>                          | Mild Petroleum           |
| <b>Odor Threshold</b>                | No information available |
| <b>pH concentrate:</b>               | No information available |
| <b>pH Dilution</b>                   | No information available |
| <b>Melting/freezing point</b>        | No information available |
| <b>Boiling Point/Range</b>           | No information available |
| <b>Flash Point</b>                   | > 191 °C / > 375.8 °F    |
| <b>Method</b>                        | Cleveland Open Cup (COC) |
| <b>Evaporation rate</b>              | No information available |
| <b>Flammability Limits in Air</b>    |                          |
| upper flammability limit             | No information available |
| lower flammability limit             | No information available |
| <b>VOC Content Product (lb/gal)</b>  | No information available |
| <b>Vapor pressure</b>                | No information available |
| <b>Vapor density</b>                 | No information available |
| <b>Specific Gravity (g/cc, 15 C)</b> | No information available |

|                                        |                          |
|----------------------------------------|--------------------------|
| Density @ 25 ° C. (g/cc):              | 0.96                     |
| Water Solubility                       | Insoluble                |
| Solubility in other solvents           | No information available |
| Partition coefficient: n-octanol/water | No information available |
| Autoignition temperature               | No information available |
| Decomposition Temperature              | No information available |
| Kinematic viscosity                    | No information available |
| Dynamic viscosity                      | No information available |
| Molecular Weight                       | No information available |

## 10. STABILITY AND REACTIVITY

|                                          |                                              |
|------------------------------------------|----------------------------------------------|
| <b>Stability:</b>                        | Stable under recommended storage conditions. |
| <b>Conditions to avoid:</b>              | None known.                                  |
| <b>Materials to avoid:</b>               | Strong oxidizing agents.                     |
| <b>Hazardous decomposition products:</b> | None under normal use.                       |
| <b>Hazardous Polymerization:</b>         | Not applicable.                              |

## 11. TOXICOLOGICAL INFORMATION

No toxicological information is available on the product. Data obtained on components are summarized below.

### Information on likely routes of exposure

|                     |                                                                                 |
|---------------------|---------------------------------------------------------------------------------|
| <b>Inhalation</b>   | May cause irritation of respiratory tract.                                      |
| <b>Eye Contact</b>  | Corrosive to the eyes and may cause severe damage including blindness.          |
| <b>Skin Contact</b> | May cause sensitization by skin contact.                                        |
| <b>Ingestion</b>    | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

| Components                                                      | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------------------------------------------------|-----------|-------------|-----------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | -         | -           | -               |
| Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates | -         | -           | -               |
| zinc bis(dibutyl)dithiocarbamate)                               | -         | -           | -               |

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

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a

carcinogen

| Components                                                      | IARC Carcinogens | NTP        | OSHA - Select Carcinogens |
|-----------------------------------------------------------------|------------------|------------|---------------------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | Not listed       | Not listed | Not listed                |
| Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates | Not listed       | Not listed | Not listed                |
| zinc bis(dibutyldithiocarbamate)                                | Not listed       | Not listed | Not listed                |

**Sensitization** Product contains a component that is classified as a skin sensitizer. No studies have been conducted on the product itself.

**Mutagenic effects:** No information available.

**Reproductive Toxicity** No information available.

**Developmental Toxicity** No information available.

**Teratogenic** No information available.

**Specific target organ systemic toxicity (single exposure)** No information available.

**Specific target organ systemic toxicity (repeated exposure)** No information available.

**Aspiration hazard** No information available.

**Additional information on toxicological effects**

No information available

## 12. ECOLOGICAL INFORMATION

| Components                                                      | Ecotoxicity - Fish Species Data:          | Ecotoxicity - Freshwater Algae Data: | Ecotoxicity - Water Flea Data: |
|-----------------------------------------------------------------|-------------------------------------------|--------------------------------------|--------------------------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | 1.0 - 5.0 mg/L LC50 10.0 - 35.0 mg/L LC50 | 1 - 1.5mg/L                          | No data                        |
| Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates | No data                                   | No data                              | No data                        |
| zinc bis(dibutyldithiocarbamate)                                | = 880 mg/L LC50 = 520 mg/L LC50           | =0.74mg/L                            | No data                        |

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

| Components                                                      | Octanol/water partition coefficient |
|-----------------------------------------------------------------|-------------------------------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | -                                   |
| Amines, C11-14-branched alkyl, monohexyl and dihexyl phosphates | -                                   |

|                                  |   |
|----------------------------------|---|
| zinc bis(dibutyldithiocarbamate) | - |
|----------------------------------|---|

**Mobility:** No data available

**Ozone:** No data available

### 13. DISPOSAL CONSIDERATIONS

**Waste from residues/unused products:** Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

**Contaminated packaging:** Do not re-use empty containers

**Methods for cleaning up:** Take up mechanically and collect in suitable container for disposal.

### 14. TRANSPORT INFORMATION

**U. S. DEPARTMENT OF TRANSPORTATION:**

Proper shipping name: Not Regulated

**TDG (CANADA):**

Proper shipping name: Not Regulated

**IMDG/IMO:**

Proper shipping name: Not Regulated

**IATA/ICAO:**

Proper shipping name: Not Regulated

### 15. REGULATORY INFORMATION

**Federal Regulations**

**OSHA Hazard Communication Standard:** This product is considered to be hazardous under the OSHA Hazard Communication Standard.

**CERCLA/SARA Information:**

**SARA (311, 312) hazard class:** This product possesses the following SARA Hazard Categories:

Immediate Health (Acute): Yes  
 Delayed Health (Chronic): Yes  
 Flammability: No  
 Pressure: No  
 Reactivity: No

| Components                                                    | Hazardous Substances and RQs | Extremely Hazardous Substances and TPQs | SARA 313 Emission Reporting |
|---------------------------------------------------------------|------------------------------|-----------------------------------------|-----------------------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts | Not listed                   | Not listed                              | 1.0 %                       |

|                                                                 |            |            |            |
|-----------------------------------------------------------------|------------|------------|------------|
| Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates | Not listed | Not listed | Not listed |
| zinc bis(dibutyldithiocarbamate)                                | Not listed | Not listed | 1.0 %      |

**Clean Air and Clean Water Acts:**

| Components                                                      | Hazardous Air Pollutants | CWA - Hazardous Substances | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|-----------------------------------------------------------------|--------------------------|----------------------------|------------------------|---------------------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | Not listed               | Not listed                 | Listed                 | Not listed                |
| Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates | Not listed               | Not listed                 | Not listed             | Not listed                |
| zinc bis(dibutyldithiocarbamate)                                | Not listed               | Not listed                 | Listed                 | Not listed                |

**U.S. STATE REGULATIONS (RTK):**

| Components                                                      | California Proposition 65 | PARTK                | MI Critical Materials | NJRTK      | MARTK      |
|-----------------------------------------------------------------|---------------------------|----------------------|-----------------------|------------|------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | Not Listed                | Environmental hazard | Not Listed            | 3012       | Not Listed |
| Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates | Not Listed                | Not Listed           | Not Listed            | Not Listed | Not Listed |
| zinc bis(dibutyldithiocarbamate)                                | Not Listed                | Environmental hazard | Not Listed            | 3012       | Not Listed |

**California Proposition 65 Status:** May contain trace amounts of listed chemicals: crystalline silica

**RCRA Status:** Not regulated

**CANADIAN REGULATIONS:**

| Components                                                      | CEPA Schedule I | Challenge Substances |
|-----------------------------------------------------------------|-----------------|----------------------|
| Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts   | Not listed      | Not listed           |
| Amines, C11-14-branched alkyl, monoethyl and diethyl phosphates | Not listed      | Not listed           |
| zinc bis(dibutyldithiocarbamate)                                | Not listed      | Not listed           |

**INVENTORY STATUS:**

**United States TSCA Inventory:** This product complies with TSCA

**Canada DSL/NDSL Inventory List** All components are registered on the DSL or are exempt from registration.

**16. OTHER INFORMATION**



**Sources of key data used to compile** Material safety data sheets of the ingredients.  
**the data sheet:**

**Prepared by:** Quaker Chemical Corporation -Safety, Health and Environmental Affairs Group - US

**Revision Date:** 04/14/2016

**Reason for revision:** New formulation.

**Personal protection recommendations should be reviewed by purchasers. Workplace conditions are important factors in specifying adequate protection.**

#### **Disclaimer**

This product's safety information is provided to assist our customers in assessing compliance with safety/health/environmental regulations. The information contained herein is based on data available to us and is believed to be accurate. However, no warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or the hazards connected with the use of the product. Since the use of this product is within the exclusive control of the user, it is the user's obligation to determine the conditions for safe use of the product. Such conditions should comply with all regulations concerning the product. The company referenced in this Safety Data Sheet assumes no liability for any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is attributable to the gross negligence of such company.

**End of Safety Data Sheet**