

## 1. Identification

|                                                               |                                                                                                                                                                               |
|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product identifier</b>                                     | <b>EQO-PURE 452</b>                                                                                                                                                           |
| <b>Other means of identification</b>                          | None.                                                                                                                                                                         |
| <b>Recommended use</b>                                        | Cutting and Grinding Fluid                                                                                                                                                    |
| <b>Recommended restrictions</b>                               | None known.                                                                                                                                                                   |
| <b>Manufacturer/Importer/Supplier/Distributor information</b> |                                                                                                                                                                               |
| <b>Manufacturer</b>                                           |                                                                                                                                                                               |
| <b>Manufacturer Name</b>                                      | QualiChem, Inc.                                                                                                                                                               |
| <b>Address</b>                                                | PO Box 926<br>Salem, VA USA                                                                                                                                                   |
| <b>Telephone</b>                                              | +1-540-375-6700                                                                                                                                                               |
| <b>Email</b>                                                  | customerservice@qualichem.com                                                                                                                                                 |
| <b>Website</b>                                                | www.qualichem.com                                                                                                                                                             |
| <b>Emergency Phone Number</b>                                 | For Chemical Emergency ONLY (spill, leak, fire, exposure, or accident), 24 hour emergency telephone, call Chemtel at +1-800-255-3924 (US, Canada); +1-813-248-0585 elsewhere. |

## 2. Hazard(s) identification

|                                                  |                                                                                                                                                                           |                             |
|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| <b>Physical hazards</b>                          | Not classified.                                                                                                                                                           |                             |
| <b>Health hazards</b>                            | Reproductive toxicity                                                                                                                                                     | Effects on or via lactation |
| <b>Label elements</b>                            |                                                                                                                                                                           |                             |
| <b>Hazard symbol</b>                             | None.                                                                                                                                                                     |                             |
| <b>Signal word</b>                               | None.                                                                                                                                                                     |                             |
| <b>Hazard statement</b>                          | May cause harm to breast-fed children.                                                                                                                                    |                             |
| <b>Precautionary statement</b>                   |                                                                                                                                                                           |                             |
| <b>Prevention</b>                                | Obtain special instructions before use. Avoid contact during pregnancy/while nursing. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. |                             |
| <b>Response</b>                                  | If exposed or concerned: Get medical advice/attention.                                                                                                                    |                             |
| <b>Storage</b>                                   | Store away from incompatible materials.                                                                                                                                   |                             |
| <b>Disposal</b>                                  | Dispose of contents/container in accordance with local/regional/national/international regulations.                                                                       |                             |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | None known.                                                                                                                                                               |                             |
| <b>Supplemental information</b>                  | None.                                                                                                                                                                     |                             |

## 3. Composition/information on ingredients

### Mixtures

| Chemical name                            | Common name and synonyms | CAS number | %       |
|------------------------------------------|--------------------------|------------|---------|
| Alkanes, C14-16, chloro                  |                          | 63449-39-8 | 10 - 20 |
| 2-(2-Aminoethoxy)ethanol                 |                          | 929-06-6   | 1 - 5   |
| Diisopropanolamine                       |                          | 110-97-4   | 1 - 5   |
| o-Phenylphenol                           |                          | 90-43-7    | 1 - 5   |
| Propylene glycol                         |                          | 57-55-6    | 1 - 5   |
| Other components below reportable levels |                          |            | 60 - 80 |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

**Composition comments** Occupational Exposure Limits for impurities are listed in Section 8.

#### 4. First-aid measures

|                                                                               |                                                                                                                                                                         |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>                                                             | Move to fresh air. Call a physician if symptoms develop or persist.                                                                                                     |
| <b>Skin contact</b>                                                           | Wash off with soap and water. Get medical attention if irritation develops and persists.                                                                                |
| <b>Eye contact</b>                                                            | Rinse with water. Get medical attention if irritation develops and persists.                                                                                            |
| <b>Ingestion</b>                                                              | Rinse mouth. Get medical attention if symptoms occur.                                                                                                                   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Direct contact with eyes may cause temporary irritation.                                                                                                                |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.                                                  |
| <b>General information</b>                                                    | IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

#### 5. Fire-fighting measures

|                                                                      |                                                                                               |
|----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).                      |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.                        |
| <b>Specific hazards arising from the chemical</b>                    | During fire, gases hazardous to health may be formed.                                         |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk.                                 |
| <b>Specific methods</b>                                              | Use standard firefighting procedures and consider the hazards of other involved materials.    |
| <b>General fire hazards</b>                                          | No unusual fire or explosion hazards noted.                                                   |

#### 6. Accidental release measures

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.                                                                                                                                                                                                                                                                                                             |
| <b>Methods and materials for containment and cleaning up</b>               | <p>This product is miscible in water. Prevent entry into waterways, sewer, basements or confined areas.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.</p> |
| <b>Environmental precautions</b>                                           | Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.                                                                                                                                                                                                                                                                                                                                                                                                                     |

#### 7. Handling and storage

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Precautions for safe handling</b>                                | Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist or vapor. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).                                                                                                                                                                                                                                                                                                                     |

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. Workplace Environmental Exposure Level (WEEL) Guides

| Components                     | Type | Value    | Form     |
|--------------------------------|------|----------|----------|
| Propylene glycol (CAS 57-55-6) | TWA  | 10 mg/m3 | Aerosol. |

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

#### Skin protection

**Hand protection** Wear protective gloves.

**Other** Wear suitable protective clothing.

**Respiratory protection** No personal respiratory protective equipment normally required.

### General hygiene considerations

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Clear Liquid.

**Color** Amber

**Odor** Mild fatty

**Odor threshold** Not available.

**pH** Not available.

**Melting point/freezing point** < 40 °F (< 4.4 °C) estimated

**Initial boiling point and boiling range** > 212 °F (> 100 °C) estimated

**Flash point** > 392 °F (> 200 °C)

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

**Vapor pressure** < 1.0 mm Hg estimated

**Vapor density** Not available.

**Relative density** Not available.

### Solubility(ies)

**Solubility (water)** Complete

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity** Not available.

**Other information**

|                               |                                       |
|-------------------------------|---------------------------------------|
| <b>Density</b>                | 1.02 g/cm <sup>3</sup><br>8.48 lb/gal |
| <b>Explosive properties</b>   | Not explosive.                        |
| <b>Flammability class</b>     | Combustible III B estimated           |
| <b>Oxidizing properties</b>   | Not oxidizing.                        |
| <b>Percent volatile</b>       | > 10 % estimated                      |
| <b>pH in aqueous solution</b> | 8.8 - 9.2 (5% Emulsion)               |
| <b>Specific gravity</b>       | 0.98                                  |

|                                     |
|-------------------------------------|
| <b>10. Stability and reactivity</b> |
|-------------------------------------|

|                                           |                                                                                               |
|-------------------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.                                                   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.                                   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials.                                                          |
| <b>Incompatible materials</b>             | Strong oxidizing agents.                                                                      |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.                                                |

|                                      |
|--------------------------------------|
| <b>11. Toxicological information</b> |
|--------------------------------------|

**Information on likely routes of exposure**

|                     |                                                          |
|---------------------|----------------------------------------------------------|
| <b>Inhalation</b>   | Not available.                                           |
| <b>Skin contact</b> | No adverse effects due to skin contact are expected.     |
| <b>Eye contact</b>  | Direct contact with eyes may cause temporary irritation. |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.                   |

|                                                                                     |                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>Symptoms related to the physical, chemical and toxicological characteristics</b> | Direct contact with eyes may cause temporary irritation. |
|-------------------------------------------------------------------------------------|----------------------------------------------------------|

**Information on toxicological effects**

|                                          |                                                          |
|------------------------------------------|----------------------------------------------------------|
| <b>Acute toxicity</b>                    | Not available.                                           |
| <b>Skin corrosion/irritation</b>         | Prolonged skin contact may cause temporary irritation.   |
| <b>Serious eye damage/eye irritation</b> | Direct contact with eyes may cause temporary irritation. |

**Respiratory or skin sensitization**

|                                  |                                                           |
|----------------------------------|-----------------------------------------------------------|
| <b>Respiratory sensitization</b> | Not a respiratory sensitizer.                             |
| <b>Skin sensitization</b>        | This product is not expected to cause skin sensitization. |

|                               |                                                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Germ cell mutagenicity</b> | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
|-------------------------------|------------------------------------------------------------------------------------------------------------------|

|                        |                                                                                 |
|------------------------|---------------------------------------------------------------------------------|
| <b>Carcinogenicity</b> | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
|------------------------|---------------------------------------------------------------------------------|

**IARC Monographs. Overall Evaluation of Carcinogenicity**

o-Phenylphenol (CAS 90-43-7) 3 Not classifiable as to carcinogenicity to humans.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**US. National Toxicology Program (NTP) Report on Carcinogens**

Not available.

|                              |                                     |
|------------------------------|-------------------------------------|
| <b>Reproductive toxicity</b> | May cause harm to breastfed babies. |
|------------------------------|-------------------------------------|

|                                                         |                 |
|---------------------------------------------------------|-----------------|
| <b>Specific target organ toxicity - single exposure</b> | Not classified. |
|---------------------------------------------------------|-----------------|

|                                                           |                 |
|-----------------------------------------------------------|-----------------|
| <b>Specific target organ toxicity - repeated exposure</b> | Not classified. |
|-----------------------------------------------------------|-----------------|

|                          |                           |
|--------------------------|---------------------------|
| <b>Aspiration hazard</b> | Not an aspiration hazard. |
|--------------------------|---------------------------|

|                        |                                                   |
|------------------------|---------------------------------------------------|
| <b>Chronic effects</b> | No known significant effects or critical hazards. |
|------------------------|---------------------------------------------------|

## 12. Ecological information

**Ecotoxicity** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

**Persistence and degradability** No data is available on the degradability of this product.

### Bioaccumulative potential

#### Partition coefficient n-octanol / water (log Kow)

|                         |       |
|-------------------------|-------|
| Alkanes, C14-16, chloro | 7     |
| Diisopropanolamine      | -0.82 |
| o-Phenylphenol          | 3.09  |
| Propylene glycol        | -0.92 |

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Hazardous waste code** The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### DOT

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

**UN number** UN3082

**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alkanes, C14-16, chloro), MARINE POLLUTANT

#### Transport hazard class(es)

**Class** 9

**Subsidiary risk** -

**Packing group** III

#### Environmental hazards

**Marine pollutant** Yes

**EmS** F-A, S-F

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not regulated as dangerous goods.

**IMDG****Marine pollutant****General information**

IMDG Regulated Marine Pollutant.

**15. Regulatory information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

o-Phenylphenol (CAS 90-43-7) Listed.

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
 Delayed Hazard - Yes  
 Fire Hazard - No  
 Pressure Hazard - No  
 Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No

**SARA 313 (TRI reporting)**

| Chemical name  | CAS number | % by wt. |
|----------------|------------|----------|
| o-Phenylphenol | 90-43-7    | 1 - 5    |

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

o-Phenylphenol (CAS 90-43-7)

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))**

o-Phenylphenol (CAS 90-43-7)

**US. Massachusetts RTK - Substance List**

2-(2-Aminoethoxy)ethanol (CAS 929-06-6)  
 Diisopropanolamine (CAS 110-97-4)  
 o-Phenylphenol (CAS 90-43-7)

**US. New Jersey Worker and Community Right-to-Know Act**

2-(2-Aminoethoxy)ethanol (CAS 929-06-6)  
 o-Phenylphenol (CAS 90-43-7)  
 Propylene glycol (CAS 57-55-6)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Diisopropanolamine (CAS 110-97-4)  
 o-Phenylphenol (CAS 90-43-7)  
 Propylene glycol (CAS 57-55-6)

**US. Rhode Island RTK**

o-Phenylphenol (CAS 90-43-7)

**US. California Proposition 65**

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**International Inventories**

| Country(s) or region        | Inventory name                                                         | On inventory (yes/no)* |
|-----------------------------|------------------------------------------------------------------------|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | No                     |
| Canada                      | Domestic Substances List (DSL)                                         | No                     |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | No                     |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | No                     |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | No                     |
| Korea                       | Existing Chemicals List (ECL)                                          | No                     |
| New Zealand                 | New Zealand Inventory                                                  | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | No                     |

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision**

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Issue date</b>           | 05-16-2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Revision date</b>        | 07-04-2015                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Version #</b>            | 04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Disclaimer</b>           | QualiChem, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. |
| <b>Revision information</b> | Composition / Information on Ingredients: Disclosure Overrides<br>First-aid measures: Indication of immediate medical attention and special treatment needed<br>Physical & Chemical Properties: Multiple Properties<br>Toxicological Information: Toxicological Data<br>Regulatory Information: Safety Phrases<br>GHS: Classification                                                                                                                                                      |