1. IDENTIFICATION

Product Identifier
Product Name
METASOL

Recommended use of the chemical and restrictions on use
Recommended use
Cleaner – commercial, industrial
Restrictions on use
For industrial use only

Supplier details
West Penetone Inc.
11411-160 Street
Edmonton, AB,
T5M3T7
Tel: 780-454-3919

Emergency Telephone Number
Canutec (613)-996-6666

2. HAZARDS IDENTIFICATION

Classification

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrosive to metals</td>
<td>1</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>1</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>1</td>
</tr>
<tr>
<td>Hazardous to the aquatic environment, acute hazard</td>
<td>3</td>
</tr>
</tbody>
</table>

Label Elements

DANGER

Hazard Statements
May be corrosive to metals
Causes severe skin burns and eye damage
Harmful to aquatic life

Precautionary Statements - Prevention
Keep only in original packaging.
Do not breathe dusts or mists.
Wash face, hands and any exposed skin thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response
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 (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
Absorb spillage to prevent material-damage

Precautionary Statements - Storage
Store in a corrosion resistant/container with a resistant inner liner. Store locked up.
Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant according to local, provincial/federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium metasilicate</td>
<td>6834-92-0</td>
<td>1-5</td>
</tr>
<tr>
<td>diethylene glycol monobutyl ether</td>
<td>112-34-5</td>
<td>1-5</td>
</tr>
<tr>
<td>sodium dodecylbenzene sulfonate</td>
<td>25155-30-0</td>
<td>1-5</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate</td>
<td>64-02-8</td>
<td>1-5</td>
</tr>
<tr>
<td>sodium lauryl ether sulphate</td>
<td>9004-82-4</td>
<td>1-5</td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td>1310-73-2</td>
<td>0.1-1.0</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye contact
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.

Skin contact
Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Inhalation
Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Ingestion
Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Most important symptoms and effects, both acute and delayed
Contact with eyes may cause serious corneal injury or damage leading to irritation, discomfort or pain, excess blinking and tear production with marked excess redness and swelling of the conjunctiva. Contact with skin may cause burns or irritation with local redness or blistering.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
None.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed including oxides of carbon, nitrogen, and sulfur and other irritating gases.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Use appropriate containment to avoid environmental contamination.

Environmental Precautions
Avoid discharge into drains/surface waters/groundwater.
Methods and material for containment and cleaning up
Contain and solidify with inert absorbent materials. Keep in suitable, closed containers for disposal. Following product recovery, flush area with water. For large spills, stop flow of material, prevent product from entering drains, and pump off product where this is without risk and possible. Proceed as above.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling
Avoid contact with skin, eyes, and clothing.

Conditions for safe storage, including any incompatibilities

Storage
Store locked up away from incompatible materials.

Incompatible Materials
Strong oxidizing materials, acids, amphoteric or light metals

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters
Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium metasilicate</td>
<td>TWA: 2 mg/m³</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>6834-92-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>diethylene glycol monobutyl ether</td>
<td>TWA: 10 ppm</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>112-34-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td>2 mg/m³ ceiling</td>
<td>2 mg/m³ ceiling</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>1310-73-2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Under the intended modes of use, exposure control measures are not required.

Individual protection measures, such as personal protective equipment

Eye/face Protection
Safety glasses with side shields or goggles when handling the product at full concentration.

Skin and body protection
Wear protective gloves and protective clothing when handling the product at full concentration.

Respiratory Protection
No personal respiratory equipment normally required.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice. Routinely wash work clothing to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:
Clear, red liquid

ODOR:
Detergent

ODOR THRESHOLD:
Not applicable

VAPOR PRESSURE, mm Hg AT 20°C:
Not applicable

VAPOR DENSITY (Air = 1):
Not applicable

RELATIVE DENSITY AT 20°C:
1.075-1.085
**10. STABILITY AND REACTIVITY**

**Reactivity**
Not reactive.

**Chemical Stability**
Stable under normal conditions.

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

**Conditions to Avoid**
Store away from incompatible materials.

**Incompatible Materials**
Strong oxidizing materials, acids, amphoteric or light metals.

**Hazardous decomposition products**
Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decompositions can lead to release of irritating gases and vapors such as oxides of carbon, nitrogen, and sulfur as well as other low molecular weight hydrocarbons.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium metasilicate 6834-92-0</td>
<td>600 mg/kg (rat)</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>diethylene glycol monobutyl ether 112-34-5</td>
<td>2410 mg/kg (mouse)</td>
<td>2764 mg/kg (rabbit)</td>
<td>&gt;2.1 mg/L (rat) – 4 h</td>
</tr>
<tr>
<td>sodium dodecylbenzene sulfonate 25155-30-0</td>
<td>500-2000 mg/kg (rat)</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate 64-02-8</td>
<td>&gt;1780–&lt;2000 mg/kg (rat)</td>
<td>Not listed</td>
<td>&gt;1 mg/L (aerosol) (rat) – 6 h</td>
</tr>
<tr>
<td>sodium lauryl ether sulphate 9004-82-4</td>
<td>&gt;2000 mg/kg (rat)</td>
<td>2000-5000 mg/kg (rabbit)</td>
<td>Not listed</td>
</tr>
<tr>
<td>sodium hydroxide 1310-73-2</td>
<td>500 mg/kg (rabbit)</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**Information on likely sources of exposure**

- **Serious eye damage/irritation**: Causes serious eye damage.
- **Skin corrosion/irritation**: May cause burns or irritation with local redness or blistering.
- **Ingestion**: Expected to be a low ingestion hazard.
- **Inhalation**: Expected to be a low inhalation hazard.

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

- **Respiratory or skin sensitization**: Not a sensitizer.
- **Germ cell mutagenicity**: None known.
- **Carcinogenicity**: No information available
- **Reproductive toxicity**: No information available
- **STOT - single exposure**: No information available.
- **STOT-repeated exposure**: No information available.
Aspiration Hazard

None.

Symptoms related to the physical, chemical and toxicological characteristics

Eye damage or irritation. Skin burns or irritation.

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Fish</th>
<th>Waterlea</th>
<th>Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>diethylene glycol monobutyl ether 112-34-5</td>
<td>1300 mg/L: 96 h lepomis macrochirus LC50</td>
<td>Not available</td>
<td>&gt;100 mg/L: 96 h desmodesmus subspicatus EC50</td>
</tr>
<tr>
<td>sodium dodecylbenzene sulfonate 25155-30-0</td>
<td>3.2-5.6 mg/L: 96 h rainbow trout LC50</td>
<td>6.3 mg/L: 48 h daphnia magna EC50</td>
<td>Not available</td>
</tr>
<tr>
<td>tetrasodium ethylenediaminetetraacetate 64-02-8</td>
<td>&gt;100 mg/L: 96 h lepomis macrochirus LC50</td>
<td>&gt;100 mg/L: 48 h daphnia magna EC50</td>
<td>&gt;100 mg/L: 72 h green algae EC50</td>
</tr>
<tr>
<td>sodium lauryl ether sulphate 9004-82-4</td>
<td>2.3 mg/L: 96 h LC50</td>
<td>&gt;13 ppm: 48 h LC50</td>
<td>&gt;56 ppm: 72 h EC50</td>
</tr>
<tr>
<td>sodium hydroxide 1310-73-2</td>
<td>1149 mg/kg: 96 h rainbow trout LC50</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

Persistence and degradability

Expected to be potentially biodegradable

Bioaccumulative potential

Accumulation in organisms is not to be expected.

Mobility in soil

No information available

Other adverse effects

Do not release untreated into natural waters. No other adverse environmental effects are expected.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

TDG classification

UN 3266, Corrosive Liquid, Basic, Inorganic, N.O.S. (sodium metasilicate solution), Class 8, PG III

15. REGULATORY INFORMATION

All ingredients are listed on the DSL

16. OTHER INFORMATION

Preparation Date 26 April, 2016
Revision Date not applicable
Revision Note not applicable

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of SDS