SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification
Product Name: Phosphate Liquid Concentrate
Product Number: 2037,2038,2029-5
Chemical Name: Ethylene glycol & colloidal silica
Chemical Family: colloidal silica
CAS Number: Blend

Company Identification
Nobilium, Div. of CMP Industries LLC
413 North Pearl St
Albany, NY 12207-1311 USA
(518)-434-3147 (For product information)
(800)-424-9300 (For emergencies)
1-800-424-9300 or 1-202-483-7616 (CHEMTREC)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
WARNING: Causes eye and skin irritation. Harmful or fatal if swallowed. May be absorbed through the skin. Inhalation may cause respiratory irritation. Prolonged overexposure may cause lung, liver and kidney damage. Contains ethylene glycol, which may cause birth defects based on animal studies.

GHS Classification:
Acute Toxicity, Oral - Category 4
Specific target organ toxicity (single exposure) Target Organs Central nervous system Category 3
Specific target organ toxicity-(repeated exposure) Target Organs-Kidney, Liver. Category 2.

GHS Hazard Symbols:
Irritant, Health Hazard

GHS Hazard Statements:
H302 - Harmful if swallowed.
H336 - May cause drowsiness or dizziness.
H373-May cause damage to organs through prolonged or repeated exposure.

GHS Precautionary Statements:
P270 - Do not eat, drink or smoke when using this product.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash face, hands any exposed skin thoroughly after handling.
P301/312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

**EYE:**
Causes eye irritation.

**SKIN:**
Causes skin irritation.

**INHALATION:**
Causes respiratory tract irritation.

**INGESTION:**
Ingestion is not considered a potential route of exposure.

**CHRONIC EFFECTS:**
Prolonged exposure may cause delayed injury to the pulmonary system.

**CARCINOGENICITY INFORMATION:**
None of the components of this product are listed as carcinogens by OSHA, IARC, NTP or the EU Directives.

**MEDICAL CONDITIONS AGRAVATED BY EXPOSURE:**
Individuals with pre-existing skin, respiratory, liver and kidney disease may be at increased risk from exposure.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**COMPONENT LISTING:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Amount</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILICA, COLLOIDAL</td>
<td>40.0 - 90.0 %</td>
<td>7631-86-9</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>0.0 - 20.0 %</td>
<td>107-21-1</td>
</tr>
</tbody>
</table>

This product contains hazardous materials as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

As defined under Sara 311 and 312, this product contains materials that are acute, chronic hazards.

### 4. FIRST AID MEASURES

**EYE CONTACT FIRST AID:**
In case of contact, immediately flush eyes with plenty of water, lifting upper and lower lids, for at least 15 minutes. Get immediate medical attention.

**SKIN CONTACT FIRST AID:**
Wash skin with soap and water. If irritation develops get immediate medical attention.

**INHALATION FIRST AID:**
If inhaled, remove to fresh air. If breathing is difficult, have qualified personnel administer oxygen. Get immediate medical attention.
INGESTION FIRST AID:
Ingestion is not considered a potential route of exposure. If ingested, do not induce vomiting. Give 2 glasses of water and get immediate medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES
COC Flash Point: N/A
Autoignition Temperature: N/A

FLAMMABLE LIMITS IN AIR
LEL: N/A
UEL: N/A

FLAMMABLE PROPERTIES:
Not Flammable under normal conditions.

EXTINGUISHING MEDIA:
Use water spray, dry chemical, alcohol foam and carbon dioxide. Cool fire exposed containers and structures with water. Do not direct a solid stream of water or foam into hot burning pools of liquid. This may cause frothing and increase fire intensity.

FIRE & EXPLOSION HAZARDS:
Closed containers may explode if exposed to extreme heat. Sudden release of hot organic chemical vapor from processing equipment operating at an elevated temperature and pressure or a sudden ingress of air into hot equipment under a vacuum may result in ignition without a source of ignition.

FIRE FIGHTING INSTRUCTIONS:
Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Do not allow run-off from fire fighting to enter drains or water courses.

COMBUSTION PRODUCTS:
Carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

LARGE SPILLS PROCEDURE:
Dike and contain spill with absorbent material such as clay or commercial sorbents. Store reclaimed material in DOT approved container for disposal.

Wear respirator and protective clothing as appropriate. Shut off source of leak. Dike & contain.

SMALL SPILLS PROCEDURE:
Same as large spill.

7. HANDLING AND STORAGE

HANDLING (PERSONNEL):
Avoid contact with the eyes, skin and clothing. Avoid breathing vapors. Wear protective clothing and equipment
as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

When heated above 240C, thermal degradation may result in the formation of harmful volatile organic decomposition products which may require respiratory protection.

HANDLING (PHYSICAL ASPECTS):
Do not reuse containers. Empty containers retain product residues can be hazardous. Follow all SDS precautions when handling empty containers.

STORAGE PRECAUTIONS:
Store in a cool dry place away from incompatible materials. Protect from physical damage.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EYE / FACE PROTECTION REQUIREMENTS:
Use safety glasses with side shields or chemical splash goggles.

SKIN PROTECTION REQUIREMENTS:
Wear impermeable gloves.

RESPIRATORY PROTECTION REQUIREMENTS:
If exposure exceeds exposure limits, use NIOSH approved respirator.

MISCELLANEOUS:
Use general or local ventilation.

EXPOSURE GUIDELINES:
  SILICA, COLLOIDAL
  OSHA Ceiling Limit: 20 ppm, 80 mg/m^3
  ETHYLENE GLYCOL
  OSHA TWA: 50 ppm, 127 mg/m^3

9. PHYSICAL AND CHEMICAL PROPERTIES

FORM: Liquid
COLOR: Translucent
ODOR: No odor
BOILING POINT: 212 F
SOLUBILITY IN WATER: Dispersible
SPECIFIC GRAVITY: 1.2 (Water = 1)

10. STABILITY AND REACTIVITY

STABILITY:
Stable.

POLYMERIZATION:
Product will not undergo polymerization.
INCOMPATIBILITY WITH OTHER MATERIALS:
Avoid contact with reactive metals such as aluminum.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:
Contact may cause irritation with redness, tearing and swelling, May also cause temporary blurred or hazy vision.

SKIN EFFECTS:
Contact may cause irritation, particularly on prolonged contact.

ACUTE ORAL EFFECTS:
Ingestion may cause mucous membrane and gastrointestinal irritation, abdominal pain, nausea, vomiting, dizziness, drowsiness, blurring of vision, lumbar pain and nervous system effects including irregular eye movements, confusion, collapse, convulsion and coma. Cardiac failure, pulmonary edema and severe kidney damage may develop. Liver damage may occur. May be fatal.

ACUTE INHALATION EFFECTS:
Inhalation of mist may cause mucous membrane and respiratory irritation. High vapor concentrations may produce headache, nausea, dizziness and irregular eye movements.

CHRONIC EFFECTS:
Prolonged occupational overexposure may cause effects on the nervous system and lung damage. Ethylene glycol has been found to cause birth defects in studies with laboratory animals.

SILICA, COLLOIDAL
Test Code: Oral Rat
Description: LD50
Species: RAT
Results: >34,000 mg/kg

ETHYLENE GLYCOL
Test Code: LD50
Description: Skin
Species: Rabbit
Results: 9530 mg/kg

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:
Dispose of waste material in accordance with all local, state/provincial, and national requirements.

14. TRANSPORT INFORMATION
15. REGULATORY INFORMATION

REGULATORY LISTS SEARCHED:
01 = SARA 313
02 = CA Proposition 65
03 = SARA 302/304
04 = CERCLA 302.4
05 = ACGIH TWA
06 = ACGIH STEL
07 = ACGIH CALC TLV
10 = OSHA CEILING
11 = TSCA

EEC Symbols and Indications of Danger:
Harmful (Xn), Irritant (Xi)

R-Phrases:
R36/38 - Irritating to eyes and skin.
R37 - Irritating to respiratory system.
R20 - Harmful by inhalation.
R22 - Harmful if swallowed.

S-Phrases:
S3/9 - Keep in a cool, well-ventilated place.

Canadian Disclosure List
SILICA, COLLOIDAL (7631-86-9)
ETHYLENE GLYCOL (107-21-1)

SARA Title III - Section 313
Phosphate Liquid Concentrate (BLEND) --
ETHYLENE GLYCOL (107-21-1)

RCRA Hazardous Substances
Phosphate Liquid Concentrate (BLEND) --

Title V
ETHYLENE GLYCOL (107-21-1)

SC Toxic Air Pollutants List
ETHYLENE GLYCOL (107-21-1)

MISCELLANEOUS INFORMATION:
This material or all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substance Control Act (TSCA).
16. OTHER INFORMATION

REASON FOR ISSUE: add current date to MSDS
PREPARED BY: John Nicpon
APPROVED BY: John Nicpon
TITLE: Quality Manager
APPROVAL DATE: March 16, 2018
SUPERCEDES DATE: March 16, 2018
RTN NUMBER: 00000212 (Official Copy)

HMIS Rating:

- Health - 1
- Flammability - 0
- Reactivity - 0

ABBREVIATIONS USED IN THIS MSDS:

- TLV - THRESHOLD LIMIT VALUE
- STEL - SHORT TERM EXPOSURE LIMIT
- RQ - REPORTABLE QUANTITY
- C - CEILING LIMIT
- NDA - NO DATA AVAILABLE
- TWA - Time Weighted Average
- TPQ - Threshold Planning Quantity
- PEL - Permissible Exposure Limit
- CAS - Chemical Abstract Service Number
- N/A - Not Applicable or Not Available

******************************************************************************
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END OF SAFETY DATA SHEET
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