Repair Instructions
“Important”
Please read ALL instructions, including NOTES & TIPS

Contents: (May vary according to item(s) being repaired)
- Clear gel coat
- Catalyst
- Color to match (powder or paste, if necessary)
- Stirring sticks
- Mixing cups
- Sandpaper (grit #320, 400, 600 and 1000/16 micron)
- Polishing compound
- Clean rags (for polishing)
- Repair instructions
- Safety data sheet(s)

1. Make sure damaged area is free of dirt.
2. Mix a small amount of gel coat (approx. 1 or 2 oz.) with 4-6 drops of catalyst.
3. Add color if needed. **SEE TIPS**
4. Fill damaged area with mixture, slightly higher than surface.
5. Allow 4-6 hours for mixture to cure at room temperature. **SEE TIPS**
6. Beginning with #400 grit sandpaper and some water, sand the area until almost flush with the surface.
7. Switch to #600 grit sandpaper and sand area flush, enlarging the area slightly.
8. Repeat with #1000/16 micron sandpaper, enlarging one last time.
9. Use the polishing compound and a clean rag to polish the area until the original sheen has returned.

**NOTE** If the item being repaired has a MATTE finish, simply use #320 grit sandpaper and water to sand the area after the repair has cured. No buffing is needed. Repair is then complete.

**TIPS**
** When mixing colors, use one (1) cup. Fill cup half full with clear gel. Add small amount of color then add more color if needed.
**For best results, allow 12 hours for mixture to cure.
**If low spots are visible after step #6 simply repeat steps 1-5.
**If scratches are not too deep, start at step #5 and proceed as directed.
**USE PROPER EYE AND SKIN PROTECTION**
SAFETY DATA SHEET
NOROX MEKP-9H

SECTION 1. IDENTIFICATION

Product name : NOROX MEKP-9H

Manufacturer or supplier’s details
Company name of supplier : United Initiators, Inc.
Address : 555 Garden Street
            Elyria OH 44035
Telephone : +1-440-323-3112
Telefax : +1-440-323-2659
Emergency telephone : CHEMTREC US (24h): +1-800-424-9300
                      CHEMTREC WORLD (24h): +1-703-527-3887
E-mail address of person responsible for the SDS : cs-initiators.nafta@united-in.com

Recommended use of the chemical and restrictions on use
Recommended use : Hardener

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200
Flammable liquids : Category 4
Organic peroxides : Type D
Acute toxicity (Oral) : Category 4
Acute toxicity (Inhalation) : Category 4
Skin corrosion : Category 1B
Serious eye damage : Category 1
Reproductive toxicity : Category 2
Acute aquatic toxicity : Category 2

GHS label elements
Hazard pictograms : [Images of hazard symbols]
Signal Word : Danger
Hazard Statements:
- H227 Combustible liquid.
- H242 Heating may cause a fire.
- H302 + H332 Harmful if swallowed or if inhaled.
- H314 Causes severe skin burns and eye damage.
- H361d Suspected of damaging the unborn child.
- H401 Toxic to aquatic life.

Precautionary Statements:

**Prevention:**
- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P220 Keep/Store away from clothing/strong acids, bases, heavy metal salts and other reducing substances/combustible materials.
- P234 Keep only in original container.
- P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264 Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protection clothing/eye protection/face protection.

**Response:**
- P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
- P305 + P351 + P338 + P310 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/doctor.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P363 Wash contaminated clothing before reuse.
- P370 + P378 In case of fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

**Storage:**
- P405 Store locked up.
- P410 Protect from sunlight.
- P411 + P235 Store at temperatures not exceeding < 100 °F/ < 38 °C. Keep cool.
- P420 Store away from other materials.

**Disposal:**
- P501 Dispose of contents/container to an approved waste disposal plant.
Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : Organic Peroxide
                  Liquid mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butanone, peroxide</td>
<td>1338-23-4</td>
<td>&gt;= 30 - &lt; 35</td>
</tr>
<tr>
<td>Trimethylpentanediol isobutyrate</td>
<td>6846-50-0</td>
<td>&gt;= 20 - &lt; 25</td>
</tr>
<tr>
<td>Butanone</td>
<td>78-93-3</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.
                 Show this material safety data sheet to the doctor in attendance.
                 Do not leave the victim unattended.
                 Symptoms of poisoning may appear several hours later.
                 Call a physician immediately.

If inhaled     : Call a physician or poison control center immediately.
                 If unconscious, place in recovery position and seek medical advice.
                 Keep respiratory tract clear.
                 Call a physician immediately.
                 If breathed in, move person into fresh air.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
                         Wash contaminated clothing before re-use.
                         If on skin, rinse well with water.
                         If on clothes, remove clothes.
                         If symptoms persist, call a physician.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
                        In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
                        Continue rinsing eyes during transport to hospital.
                        Remove contact lenses.
                        Protect unharmed eye.
                        Keep eye wide open while rinsing.
                        If eye irritation persists, consult a specialist.

If swallowed    : Keep respiratory tract clear.
Do NOT induce vomiting.  
Call a physician immediately.  
Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed:  
Harmful if swallowed or if inhaled.  
Causes serious eye damage.  
Suspected of damaging the unborn child.  
Causes severe burns.

Protection of first-aiders:  
First Aid responders should pay attention to self-protection and use the recommended protective clothing.

Notes to physician:  
Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:  
- Water spray  
- Alcohol-resistant foam  
- Carbon dioxide (CO2)  
- Dry chemical

Unsuitable extinguishing media:  
- High volume water jet

Specific hazards during firefighting:  
Contact with incompatible materials or exposure to temperatures exceeding SADT may result in a self-accelerating decomposition reaction with release of flammable vapors which may auto-ignite.

- Flash back possible over considerable distance.  
- Vapors may form explosive mixtures with air.  
- Cool closed containers exposed to fire with water spray.

Specific extinguishing methods:  
- Do not use a solid water stream as it may scatter and spread fire.  
- Remove undamaged containers from fire area if it is safe to do so.  
- Use water spray to cool unopened containers.

Further information:  
Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters:  
- Wear self-contained breathing apparatus for firefighting if necessary.  
- Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment:  
- Use personal protective equipment.
tive equipment and emergency procedures
Remove all sources of ignition.
Follow safe handling advice and personal protective equipment recommendations.
Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.
Never return spills in original containers for re-use.
Treat recovered material as described in the section "Disposal considerations".

Environmental precautions
Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up
Contact with incompatible substances can cause decomposition at or below SADT.
Clear spills immediately.
Suppress (knock down) gases/vapors/mists with a water spray jet.
To clean the floor and all objects contaminated by this material, use plenty of water.
Soak up with inert absorbent material.
Isolate waste and do not reuse.
Non-sparking tools should be used.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.

SECTION 7. HANDLING AND STORAGE

Technical measures
See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Advice on protection against fire and explosion
Keep away from heat and sources of ignition. Use only explosion-proof equipment. Keep away from combustible material.

Advice on safe handling
Do not swallow.
Do not breathe vapors/dust.
Avoid contact with skin and eyes.
Avoid formation of aerosol.
Take precautionary measures against static discharges.
Never return any product to the container from which it was originally removed.
Provide sufficient air exchange and/or exhaust in work rooms.
Avoid confinement.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Smoking, eating and drinking should be prohibited in the application area.
Wash thoroughly after handling.
For personal protection see section 8.
Protect from contamination.

**Conditions for safe storage:**
- Avoid impurities (e.g. rust, dust, ash), risk of decomposition.
- Electrical installations / working materials must comply with the technological safety standards.
- Containers which are opened must be carefully resealed and kept upright to prevent leakage.
- Store in original container.
- Keep containers tightly closed in a cool, well-ventilated place.
- Store in accordance with the particular national regulations.

**Materials to avoid:**
- Keep away from strong acids, bases, heavy metal salts and other reducing substances.

**Recommended storage temperature:**
- < 100 °F
- < 38 °C

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimethyl phthalate</td>
<td>131-11-3</td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>OSHA P-0</td>
</tr>
<tr>
<td>2-Butanone, peroxide</td>
<td>1338-23-4</td>
<td>C</td>
<td>0.2 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>0.2 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C</td>
<td>0.7 ppm</td>
<td>OSHA P-0</td>
</tr>
<tr>
<td>Butanone</td>
<td>78-93-3</td>
<td>TWA</td>
<td>200 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>300 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>590 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST</td>
<td>300 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>590 mg/m³</td>
<td>OSHA P-0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>300 ppm</td>
<td>OSHA P-0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>885 mg/m³</td>
<td>OSHA P-0</td>
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<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>TWA</td>
<td>1 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1 ppm</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>1 ppm</td>
<td>OSHA P-0</td>
</tr>
</tbody>
</table>
Hazardous components without workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trimethylpentanediol</td>
<td>6846-50-0</td>
</tr>
<tr>
<td>isobutyrate</td>
<td></td>
</tr>
</tbody>
</table>

Biological occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Biological specimen</th>
<th>Sampling time</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone</td>
<td>78-93-3</td>
<td>methyl ethyl ketone</td>
<td>Urine</td>
<td>End of shift (As soon as possible after exposure ceases)</td>
<td>2 mg/l</td>
<td>ACGIH BEI</td>
</tr>
</tbody>
</table>

Engineering measures

Minimize workplace exposure concentrations.

Personal protective equipment

Respiratory protection: In the case of dust or aerosol formation use respirator with an approved filter.

Filter type: ABEK-filter

Hand protection

Material: butyl-rubber

Break through time: > 480 min

Glove thickness: 0.5 mm

Remarks

Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove Wash hands before breaks and at the end of workday.

Eye protection

Tightly fitting safety goggles

Please wear suitable protective goggles. Also wear face protection if there is a splash hazard. Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection

Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.

Hygiene measures

Keep away from food and drink. When using do not eat or drink.
When using do not smoke. Wash hands before breaks and immediately after handling the product.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>slight</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>Decomposes below the boiling point.</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 76 °C</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>&gt; 1</td>
</tr>
<tr>
<td>Density</td>
<td>1.1 g/cm³</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Self-Accelerating decomposition temperature (SADT)</td>
<td>60 °C</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>not determined</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>The substance or mixture is not classified as oxidizing. Organic peroxide</td>
</tr>
</tbody>
</table>
REACTIVITY AND STABILITY

Reactivity: Stable under recommended storage conditions.
Chemical stability: Stable under recommended storage conditions.
Possibility of hazardous reactions: Vapors may form explosive mixture with air.
Conditions to avoid: Protect from contamination. Contact with incompatible substances can cause decomposition at or below SADT. Heat, flames and sparks. Avoid confinement.
Incompatible materials: Accelerators, strong acids and bases, heavy metals and heavy metal salts, reducing agents.

TOXICOLOGICAL INFORMATION

Acute toxicity
Harmful if swallowed or if inhaled.

Product:
Acute oral toxicity: Acute toxicity estimate: 1,431 mg/kg
Method: Calculation method
Acute inhalation toxicity: Acute toxicity estimate: 4.29 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method
Acute dermal toxicity: Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Ingredients:
2-Butanone, peroxide:
Acute oral toxicity: Acute toxicity estimate: 500 mg/kg
Method: Expert judgment
Acute inhalation toxicity: Acute toxicity estimate: 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Expert judgment
Assessment: The component/mixture is moderately toxic after short term inhalation.
Remarks: Based on data from similar materials
Acute dermal toxicity: Acute toxicity estimate: 2,500 mg/kg
Method: Expert judgment
Trimethylpentanediol isobutyrate:
Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg
Method: Expert judgment
Assessment: The substance or mixture has no acute oral toxicity

Acute inhalation toxicity: LCLo (Rat): > 0.12 mg/l
Exposure time: 6 h
Test atmosphere: dust/mist
Method: Expert judgment
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: No mortality observed at this dose.

Acute dermal toxicity: LD50 (Guinea pig): > 2,000 mg/kg
Method: Expert judgment
Assessment: The substance or mixture has no acute dermal toxicity

Butanone:
Acute oral toxicity: LD50 (Rat): 2,193 mg/kg
Method: OECD Test Guideline 423

Acute dermal toxicity: LD50 (Rabbit): > 5,000 mg/kg
Method: OECD Test Guideline 402

Hydrogen peroxide:
Acute oral toxicity: LD50 (Rat, male): 1,026 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity: LC50 (Rat): > 0.17 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The component/mixture is moderately toxic after short term inhalation.
Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Acute dermal toxicity: LD50 (Rabbit): > 6,500 mg/kg

Skin corrosion/irritation
Causes severe burns.

Product:
Remarks: Extremely corrosive and destructive to tissue.

Ingredients:

2-Butanone, peroxide:
Species: Rabbit
Result: Causes burns.
Trimethylpentanediol isobutyrate:
Species: Guinea pig
Exposure time: 24 h
Result: No skin irritation
Remarks: Based on available data, the classification criteria are not met.

Butanone:
Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Hydrogen peroxide:
Result: Corrosive after 3 minutes or less of exposure

Serious eye damage/eye irritation
Causes serious eye damage.

Product:
Remarks: May cause irreversible eye damage.

Ingredients:

2-Butanone, peroxide:
Result: Irreversible effects on the eye

Trimethylpentanediol isobutyrate:
Species: Rabbit
Result: No eye irritation

Butanone:
Species: Rabbit
Result: Eye irritation
Method: OECD Test Guideline 405

Hydrogen peroxide:
Result: Irreversible effects on the eye

Respiratory or skin sensitization

Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Ingredients:

2-Butanone, peroxide:
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitization.

Assessment: Harmful if swallowed., Harmful if inhaled.

**Trimethylpentanediol isobutyrate:**
Species: Guinea pig
Result: Does not cause skin sensitization.

**Butanone:**
Routes of exposure: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitization.

**Germ cell mutagenicity**
Not classified based on available information.

**Ingredients:**

**2-Butanone, peroxide:**
Genotoxicity in vitro
: Method: OECD Test Guideline 473
  Result: negative
: Method: OECD Test Guideline 471
  Result: negative
: Method: OECD Test Guideline 476
  Result: negative

**Trimethylpentanediol isobutyrate:**
Genotoxicity in vitro
: Method: OECD Test Guideline 476
  Result: negative
: Test Type: Ames test
  Result: negative
: Method: OECD Test Guideline 473
  Result: negative

**Butanone:**
Genotoxicity in vitro
: Method: OECD Test Guideline 471
  Result: negative
: Method: OECD Test Guideline 476
  Result: negative
: Method: OECD Test Guideline 473
  Result: negative

Genotoxicity in vivo
: Species: Mouse
  Application Route: Intraperitoneal
  Method: OECD Test Guideline 474
Hydrogen peroxide:
Genotoxicity in vitro:
   Test Type: Ames test
   Result: negative
Genotoxicity in vivo:
   Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
   Species: Mouse
   Result: negative

Carcinogenicity
Not classified based on available information.

Ingredients:
2-Butanone, peroxide:
Remarks: This information is not available.

IARC
No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP
No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity
Suspected of damaging the unborn child.

Ingredients:
2-Butanone, peroxide:
Effects on fertility:
   Species: Rat
   Application Route: oral (gavage)
   General Toxicity Parent: NOAEL: 50 mg/kg body weight
   Method: OECD Test Guideline 421
   Result: negative

Trimethylpentanediol isobutyrate:
Effects on fetal development:
   Species: Rabbit
   Application Route: Oral
   300 mg/kg
   Reproductive toxicity - Assessment: Suspected of damaging the unborn child., Some evidence of adverse effects on development, based on animal experiments.
Butanone:

Effects on fertility:
Species: Rat
Application Route: oral (drinking water)
General Toxicity Parent: NOAEL: 10,000 mg/l
General Toxicity F1: NOAEL: 10,000 mg/l
Method: OECD Test Guideline 416
Remarks: Based on data from similar materials

Species: Rat
Application Route: oral (drinking water)
General Toxicity Parent: LOAEL: 20,000 mg/l
Method: OECD Test Guideline 416
Remarks: Based on data from similar materials

Effects on fetal development:
Species: Rat
Application Route: Inhalation
General Toxicity Maternal: NOAEC: ca. 1,002 mg/kg body weight
Teratogenicity: NOAEC Parent: ca. 1,002 mg/kg body weight
Method: OECD Test Guideline 414
Result: negative

STOT-single exposure
Not classified based on available information.

**Ingredients:**

**Butanone:**

Assessment: May cause drowsiness or dizziness.

**Hydrogen peroxide:**

Assessment: May cause respiratory irritation.

STOT-repeated exposure
Not classified based on available information.

**Repeated dose toxicity**

**Ingredients:**

**2-Butanone, peroxide:**

Species: Rat
NOAEL: 200 mg/kg
Application Route: oral (gavage)
Exposure time: 28 d
Method: OECD Test Guideline 407

Repeated dose toxicity - Harmful if swallowed., Harmful if inhaled.
Assessment

**Hydrogen peroxide:**

Species: Mouse
Application Route: Ingestion
Exposure time: 90 d
Symptoms: No adverse effects.

**Aspiration toxicity**
Not classified based on available information.

**Ingredients:**

**Trimethylpentanediol isobutyrate:**
Not classified due to data which are conclusive although insufficient for classification.

**Further information**

**Product:**
Remarks: No data available

---

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ingredients:**

**2-Butanone, peroxide:**

Toxicity to fish:
- LC50 (Poecilia reticulata (guppy)): 44.2 mg/l
  Exposure time: 96 h
  Method: OECD Test Guideline 203
- NOEC (Poecilia reticulata (guppy)): 18 mg/l
  Exposure time: 96 h
  Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates:
- EC50 (Daphnia magna (Water flea)): 39 mg/l
  Exposure time: 48 h
  Method: OECD Test Guideline 202
- NOEC (Daphnia magna (Water flea)): 26.7 mg/l
  Method: OECD Test Guideline 202

Toxicity to algae:
- EC50 (Pseudokirchneriella subcapitata (green algae)): 5.6 mg/l
  Exposure time: 72 h
  Method: OECD Test Guideline 201
- NOEC (Pseudokirchneriella subcapitata (green algae)): 2.1 mg/l
  Exposure time: 72 h
  Method: OECD Test Guideline 201

Toxicity to microorganisms:
- EC50 (Bacteria): 48 mg/l
  Exposure time: 0.5 h
  Method: OECD Test Guideline 209

**Trimethylpentanediol isobutyrate:**
Toxicity to fish : NOEC (Fish): \(\geq 6\) mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia): \(\geq 1.46\) mg/l  
Exposure time: 48 h  
NOEC (Daphnia): 0.7 mg/l  
Exposure time: 21 d

Toxicity to algae : EC50 (Chlorella pyrenoidosa): \(> 7.49\) mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : LOEC (Daphnia magna (Water flea)): 0.7 mg/l  
Exposure time: 21 d

Ecotoxicology Assessment

Acute aquatic toxicity : This product has no known ecotoxicological effects.

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Butanone:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 2,993 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 308 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 2,029 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 201

Toxicity to microorganisms : NOEC (Pseudomonas putida): 1,150 mg/l  
Exposure time: 16 h  
Method: DIN 38 412 Part 8

Hydrogen peroxide:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 16.4 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia pulex (Water flea)): 2.4 mg/l  
Exposure time: 48 h

Toxicity to algae : EC50 (Skeletonema costatum (marine diatom)): 1.38 mg/l  
Exposure time: 72 h  
NOEC (Skeletonema costatum (marine diatom)): 0.63 mg/l  
Exposure time: 72 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC (Daphnia magna (Water flea)): 0.63 mg/l Exposure time: 21 d

Toxicity to microorganisms: EC50: Method: OECD Test Guideline 209

Persistence and degradability

Ingredients:

2-Butanone, peroxide:
Biodegradability: Result: Readily biodegradable. Method: OECD Test Guideline 301D

Trimethylpentanediol isobutyrate:
Biodegradability: Result: rapidly biodegradable Exposure time: 28 d Method: OECD Test Guideline 301B

Butanone:
Biodegradability: Result: Readily biodegradable. Method: OECD Test Guideline 301D

Hydrogen peroxide:
Biodegradability: Result: Readily biodegradable.

Bioaccumulative potential

Ingredients:

2-Butanone, peroxide:
Partition coefficient: n-octanol/water: log Pow: < 0.3 (25 °C)

Trimethylpentanediol isobutyrate:

Butanone:
Partition coefficient: n-octanol/water: log Pow: 0.3 (40 °C)

Hydrogen peroxide:
Partition coefficient: n-octanol/water: log Pow: -1.57 Remarks: Calculation
Mobility in soil
No data available

Other adverse effects

Product:
Ozone-Depletion Potential:
Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information:
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Toxic to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues:
The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Dispose of wastes in an approved waste disposal facility.

Contaminated packaging:
Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
Do not burn, or use a cutting torch on, the empty drum.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
UN number: UN 3105
Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID
(METHYL ETHYL KETONE PEROXIDE(S))
Class: 5.2
Packing group: Not assigned by regulation
Labels: 5.2

IATA-DGR
UN/ID No.: UN 3105
Proper shipping name: Organic peroxide type D, liquid
(Methyl ethyl ketone peroxide(s))
Class: 5.2
Packing group: Not assigned by regulation
Labels: Organic Peroxides, Keep Away From Heat
Packing instruction (cargo aircraft): 570
Packing instruction (passen-
ger aircraft)

**IMDG-Code**

- UN number: UN 3105
- Proper shipping name: ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE(S))
- Class: 5.2
- Packing group: Not assigned by regulation
- Labels: 5.2
- EmS Code: F-J, S-R
- Marine pollutant: no

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation**

- **49 CFR**
  - UN/ID/NA number: UN 3105
  - Proper shipping name: Organic peroxide type D, liquid (Methyl ethyl ketone peroxide(s), <=45%)
  - Class: 5.2
  - Packing group: Not assigned by regulation
  - Labels: ORGANIC PEROXIDE
  - ERG Code: 145
  - Marine pollutant: no

### SECTION 15. REGULATORY INFORMATION

**EPCRA - Emergency Planning and Community Right-to-Know**

**CERCLLA Reportable Quantity**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butanone, peroxide</td>
<td>1338-23-4</td>
<td>10</td>
<td>29</td>
</tr>
</tbody>
</table>

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>7722-84-1</td>
<td>1000</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

**SARA 311/312 Hazards**

- Fire Hazard
- Reactivity Hazard
- Acute Health Hazard
- Chronic Health Hazard

**SARA 302**

The following components are subject to reporting levels established by SARA Title III, Section 302:

- Hydrogen peroxide 7722-84-1

**SARA 313**

The following components are subject to reporting levels established by SARA Title III, Section 313:

- dimethyl phthalate 131-11-3
Clean Air Act
This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
- dimethyl phthalate 131-11-3
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):
- Butanone 78-93-3

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product contains the following toxic pollutants listed under the U.S. Clean Water Act Section 307:
- dimethyl phthalate 131-11-3

California Prop. 65
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:
- DSL (CA): All components of this product are on the Canadian DSL
- AICS (AU): On the inventory, or in compliance with the inventory
- NZIoC (NZ): On the inventory, or in compliance with the inventory
- ENCS (JP): On the inventory, or in compliance with the inventory
- ISHL (JP): On the inventory, or in compliance with the inventory
- KECI (KR): On the inventory, or in compliance with the inventory
- PICCS (PH): On the inventory, or in compliance with the inventory
- IECSC (CN): On the inventory, or in compliance with the inventory
- TCSI (TW): On the inventory, or in compliance with the inventory
- TSCA (US): On TSCA Inventory

TSCA list
No substances are subject to a Significant New Use Rule.
No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION
**SAFETY DATA SHEET**

**NOROX MEKP-9H**

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date:</th>
<th>SDS Number:</th>
<th>Print Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>10/19/2018</td>
<td>600000000121</td>
<td>11/08/2018</td>
</tr>
</tbody>
</table>

**Full text of other abbreviations**

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Revision Date** : 10/19/2018

The information provided in this Material Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

US / Z8
Section 1  
CHEMICAL PRODUCT and COMPANY IDENTIFICATION

Identification:  Product Name:  
AquaBuff 2000

Recommended use:  
Polishing

Manufacturer:  
Matchless Metal Polish Co.
840 W. 49th Pl.
Chicago, IL 60609
PH: (01) 773.924.1515 [U.S.A.]
FAX: (01) 773.924.5513 [U.S.A.]

Emergency telephone:  
(01) 773.924.1515 [U.S.A.] [24 hour]

Section 2  
HAZARDS IDENTIFICATION

Hazard Classification:  Irritant

WARNING:  Dust produced in use may temporarily irritate eyes, skin, and respiratory system.

Hazard Classification

NFPA HAZARD RATING:  
Fire: (1, minimal)  Health: (2, minimal)  Reactivity: (1, minimal)

HMIS:  
Fire: (5, minimal)  Health: (4, minimal)  Reactivity: (5, minimal)

Hazard phrases:  
H316, H320, H335: Dust produced during use may cause mild irritation of skin, eyes, and respiratory tract.

Precautionary Phrases:  
P102: Keep out of reach of children.
P261: Avoid breathing dust, may cause respiratory tract irritation.
P264: Wash thoroughly after handling. Avoid skin irritation by wearing protective gloves. If needed wear eye protection and dust mask.

Section 3  
COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>% Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum oxide, non-fibrous</td>
<td>1344-28-1</td>
<td>215-691-6</td>
<td>40-50</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>40-50</td>
</tr>
<tr>
<td>Tallow derivatives</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>10-20</td>
</tr>
</tbody>
</table>

Section 4  
FIRST AID MEASURES

General:  Remove contaminated clothing.

Inhalation:  If excessive dust is inhaled, remove to fresh air. Seek medical attention if breathing difficulties persist.

Eye Contact:  Check for and remove any contact lenses. Flush eyes with large amounts of water, cold water may be used. Seek medical attention if vision difficulties occur.

Skin Contact:  Wash contaminated skin with soapy water. Remove contaminated clothing and shoes. Wash clothing and shoes before reuse.

Ingestion:  Immediately rinse mouth and drink plenty of water. DO NOT INDUCE VOMITING unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Ingestion of small quantities is not expected to produce symptoms. If large quantities are swallowed, obtain medical help.
Section 5  FIRE FIGHTING MEASURES
Flash Point & Method: over 370°F (estimated).
Fire Fighting Instructions: Water-based, not flammable in liquid state. Fire Fighting Equipment: Use self-contained breathing apparatus and turn-out gear. Hazards during fire-fighting: Heat may produce steam which can cause burns.

Section 6  ACCIDENTAL RELEASE MEASURES
Emergency Action: Isolate spill or leak area immediately.
May make floor slippery when wet. If material cannot be recovered, transfer to waste container and dispose in local landfill, in compliance with local, state and federal regulations. Clean up residual material with water.

Section 7  HANDLING AND STORAGE
Handling: Wear protective gloves if skin irritation is experienced. Wash hands before eating. Avoid breathing dust produced in use.
Storage: Store at room temperature. Avoid freezing and excessive heat.

Section 8  EXPOSURE CONTROL / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Aluminum oxide, non-fibrous</th>
<th>CAS Number</th>
<th>EC Number</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1344-28-1</td>
<td>215-691-6</td>
<td>15 mg/m 3 TWA</td>
<td>10 mg/m 3 TWA</td>
<td></td>
</tr>
</tbody>
</table>

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep dust levels below occupational exposure limits. See section 2 for component exposure guidelines. Local exhaust ventilation is acceptable.
Respirator: Use a NIOSH-certified dust mask or equivalent.
Hand Protection: Wear gloves.
Eye Protection: Protective eye-wear should be used in dusty environment.
Other Recommendations: Wear protective clothing such as long sleeves. Wash hands after handling.

Section 9  PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>CAS Number</th>
<th>EC Number</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
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</thead>
<tbody>
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<td>1344-28-1</td>
<td>215-691-6</td>
<td>15 mg/m 3 TWA</td>
<td>10 mg/m 3 TWA</td>
</tr>
</tbody>
</table>

Density: approximately 1.5 g/cm3 (25° C / 77° F)
\[ \text{Density} = \text{1.5 g/cm}^3 \]
\[ \text{Density} = \text{25° C / 77° F} \]

pH: 9.5 – 10.5

Boiling Point: approximately 212°F / 100°C

Freeze Point: approximately 32°F / 0°C

Vapor Density (Air=1): No data available

Odor: Mildly chemical

Section 10  STABILITY AND REACTIVITY

General: Stable

Incompatible Materials and Conditions to Avoid: Strong oxidizing agents

Hazardous Polymerization: Will not occur.

Section 11  TOXICOLOGY INFORMATION

No information available on Acute or Chronic ingestion or inhalation toxicity.

No ingredients present above 0.1% which are carcinogenic according to NTP, IARC, or OSHA findings.

Section 12  ECOLOGICAL INFORMATION

All ingredients are inert in the environment, or biodegrade to non-hazardous compounds.

Section 13  DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 Classifications: not classified as hazardous.
Federal, State, and Local laws governing disposal of material can differ. Ensure proper disposal compliance with proper authorities before disposal.

Section 14  TRANSPORTATION INFORMATION

NON-HAZARDOUS MATERIAL Not regulated for transportation under US DOT, IATA, ICAO, IMDG, Canadian TDG Regulations, or EU ADR.

Section 15  REGULATORY INFORMATION

- CERCLA/Superfund, 40 CFR 117, 302: None of the chemicals are CERCLA hazards
- SARA Superfund and Reauthorization Act of 1986 Title III sections 302, 311, 312 and 313:
  - Section 302 – None of the chemicals are extremely hazardous substances (40 CFR 355).
  - Section 311/312 – Material Safety Data Sheet Requirements (40 CFR 370): By our hazard evaluation, this product may be an eye and skin irritant.
- Section 313 – List of Toxic Chemicals (40CFR 372): This product contains no chemicals (at level of 1% or greater) that are found on the 313 list of Toxic Chemicals.
- Toxic Substance Control Act (TSCA): All substances are TSCA listed.

STATE REGULATIONS:
- No substances in this mixture are specifically listed by individual state. Other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.
- California Proposition 65: None of the ingredients are on the Proposition 65 list
- Canada WHMIS: Not Controlled. All components of this product are included in the Canadian DSL (Domestic Substances List)

Sections 16  OTHER INFORMATION

LABEL INFORMATION: For Shipping Label information refer to section 14
Product label warnings are as follows (Comparable CHIP Safety & Risk phrases are noted):
[H303] May be harmful if swallowed.

REVISION DATES  SECTIONS  REVISED BY
5/1/2018  3-year review  kb

ABBREVIATIONS USED IN THIS DOCUMENT: NE – Not Established, NA – Not Applicable, NIF – No Information Found

ABRIDGED LIST OF REFERENCES:
Code of Federal Regulations (CFR)
Chemical Guide and OSHA Hazardous Communication Standard
US Department of Labor; Occupational Safety & Health Administration (www.osha.gov)
The Environmental Protection Agency (www.epa.gov)
The Globally Harmonized System of Classification and Labeling of Chemicals (GHS)

To the best of our knowledge, the information contained herein is accurate. However, neither MATCHLESS METAL POLISH nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.
1. Identification

Product Name: MARBLE CLEAR GEL COAT
STYPOL 040-4917

SDS Number: 0404917MRB2

Product Use: Industrial

Manufacturer, Importer, Supplier
Polynt Composites USA, Inc.
99 East Cottage Avenue
Carpentersville IL 60110
E-Mail: MSDS@polynt.com

Telephone
For Emergency Transportation Information
CHEMTREC US Domestic (800) 424-9300
CHEMTREC International (703) 527-3887

For additional health, safety or regulatory information, call (847) 836-3659

2. Hazard identification

EMERGENCY OVERVIEW: Risk of serious damage to the lungs (by aspiration). May cause sensitization by inhalation and skin contact.

GHS Classification
Acute Tox. 4 Inhalation, Carc. 2, Eye Irrit. 2, Flam. Liq. 3, Skin Irrit. 2, Skin Sens. 1, STOT RE 1, STOT SE 3 NE, STOT SE 3 RTI

Symbol(s) of Product

Signal Word
Danger

GHS HAZARD STATEMENTS
Flammable Liquid, category 3 H226 Flammable liquid and vapour.
Carcinogenicity, category 2 H351 Suspected of causing cancer.
STOT, single exposure, category 3, RTI H335 May cause respiratory irritation.
STOT, single exposure, category 3, NE H336 May cause drowsiness or dizziness.
STOT, repeated exposure, category 1 H372 Causes damage to organs through prolonged or repeated exposure.
Acute Toxicity, Inhalation, category 4 H332 Harmful if inhaled.
Skin Irritation, category 2  H315  Causes skin irritation.
Eye Irritation, category 2  H319  Causes serious eye irritation.
Skin Sensitizer, category 1  H317  May cause an allergic skin reaction.

GHS LABEL PRECAUTIONARY STATEMENTS
P210  Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P280  Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353  IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378  In case of fire: Use dry chemical, foam, water spray to extinguish.
P403+P235  Store in a well-ventilated place. Keep cool.
P501  Dispose of contents/container to in accordance with local/regional/national/international regulations.
P201  Obtain special instructions before use.
P308+P313  IF exposed or concerned: Get medical advice/attention.
P405  Store locked up.
P312  Call a POISON CENTER or doctor/physician if you feel unwell.
P403+P233  Store in a well-ventilated place. Keep container tightly closed.
P260  Do not breathe dust/fume/gas/mist/vapours/spray.
P264  Wash ... thoroughly after handling.
P271  Use only outdoors or in a well-ventilated area.
P304+P340  IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P302+P352  IF ON SKIN: Wash with plenty of soap and water.
P321  Specific treatment (see ... on this label).
P332+P313  If skin irritation occurs: Get medical advice/attention.
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/attention.
P333+P313  If skin irritation or rash occurs: Get medical advice/attention.
P281  Use personal protective equipment as required.

GHS SDS PRECAUTIONARY STATEMENTS
P240  Ground/bond container and receiving equipment.
P241  Use explosion-proof electrical/ventilating/lighting/... equipment.
P242  Use only non-sparking tools.
P243  Take precautionary measures against static discharge.
P270  Do not eat, drink or smoke when using this product.
P363  Wash contaminated clothing before reuse.

3. Composition/Information on ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Wt. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE MONOMER</td>
<td>100-42-5</td>
<td>30 - 40</td>
</tr>
<tr>
<td>METHYL METHACRYLATE</td>
<td>80-62-6</td>
<td>5.0 - 10</td>
</tr>
<tr>
<td>LIGHT AROMATIC NAPHTHA</td>
<td>64742-95-6</td>
<td>0.1-1.0</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>107-21-1</td>
<td>0.1-1.0</td>
</tr>
</tbody>
</table>

4. First-aid measures

FIRST AID - EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

FIRST AID - INGESTION: Do NOT induce vomiting. If ingested, consult a physician. Aspiration hazard if swallowed - can enter lungs and cause damage.

FIRST AID - INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

FIRST AID - SKIN CONTACT: Wash with soap and water. Remove contaminated clothes and shoes. Get medical attention if irritation develops.
5. Fire-fighting measures

Extinguishing Media:

Suitable: Carbon Dioxide, Dry Chemical, Foam, Water Fog
Not suitable: Water Jet

SPECIAL FIREFIGHTING PROCEDURES: Use full protective clothing. Use a properly-fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Vapors may be ignited by heat, pilot lights, other flames and ignition sources. Self-accelerating decomposition may occur if the specific control temperature is not maintained. Vapors may accumulate in confined areas (basement, tanks, hopper/tank cars, etc.). Cool containers/tanks with water spray. Do not use a solid water stream as it may scatter and spread fire. In case of fire: Use carbon dioxide, dry chemical, foam, water fog to extinguish.

UNUSUAL FIRE AND EXPLOSION HAZARDS: No Information

6. Accidental release measures

ENVIRONMENTAL MEASURES: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Prevent entry into waterways, sewers, basements or confined areas.

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Do not flush into surface water or sanitary sewer system. Use non-sparking tools and equipment. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Dike to prevent entering any sewer or waterway. Transfer liquid to a holding container. Evacuate personnel to safe areas. Remove all sources of ignition. Ensure adequate ventilation. Avoid breathing vapors or mists.

PRECAUTIONARY MEASURES: No Information

7. Handling and storage

HANDLING: Keep away from heat and sources of ignition. Ground/bond container and equipment. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors, mist or gas. Use only in well-ventilated areas. Wash contaminated clothing before reuse.

STORAGE: Store and dispose according to national, state and local regulations. Keep container closed when not in use. Store contents under 100F (37.8C). Store drums with bung in the upright position. Electrical equipment must be grounded; suitable for the classification of the area where it is installed and conform to the National Electric Code (see NFPA 70). Store in cool well ventilated space away from incompatible materials.

HYGIENIC PRACTICES: General industrial hygiene practice. Wash hands before eating, drinking, or smoking. When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

WORK PRACTICES: Put on appropriate personal protective equipment. Wash hands after handling chemicals and before eating, drinking, or smoking. Read and understand entire SDS before handling chemical.

SPECIAL HANDLING PROCEDURES: Put on appropriate personal protective equipment. Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use.

8. Exposure controls/personal protection

Ingredients with Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV-TWA</th>
<th>ACGIH-TLV STEL</th>
<th>OSHA PEL-TWA</th>
<th>OSHA CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE MONOMER</td>
<td>20 ppm</td>
<td>40 ppm</td>
<td>100 ppm</td>
<td>200 ppm</td>
</tr>
<tr>
<td>METHYL METHACRYLATE</td>
<td>50 ppm</td>
<td>100 ppm</td>
<td>100 ppm</td>
<td>N.E.</td>
</tr>
<tr>
<td>LIGHT AROMATIC NAPHTHA</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>25 ppm</td>
<td>50 ppm</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

Further Advice: MEL = Maximum Exposure Limit  OES = Occupational Exposure Standard  SUP = Supplier's Recommendation  Sk = Skin Sensitizer  N.E. = Not Established
Personal Protection

**RESPIRATORY PROTECTION:** Use a properly-fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. When concentrations exceed the exposure limits specified, use of a NIOSH-approved dust, mist and fume respirator is recommended. Where the protection factor of the respirator may be exceeded, use of a full facepiece, supplied air, or Self Contained Breathing Apparatus (SCBA) may be necessary.

**SKIN PROTECTION:** Wear suitable protective equipment. Wear chemical resistant footwear and clothing such as gloves, an apron or a whole body suit as appropriate.

**EYE PROTECTION:** Ensure that eyewash stations and safety showers are close to the workstation location. Safety glasses with side-shields. Wear chemical-resistant glasses and/or goggles and a face shield when eye and face contact is possible due to splashing or spraying of material.

**OTHER PROTECTIVE EQUIPMENT:** Use good hygiene practices. Wash face and hands before eating, drinking, and smoking. Eye wash and safety showers should be readily available.

**HYGIENIC PRACTICES:** General industrial hygiene practice. Wash hands before eating, drinking, or smoking. When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

### 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Pink</td>
</tr>
<tr>
<td>Odor</td>
<td>Styrene</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>Density, g/cm³</td>
<td>1.051</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH</td>
<td>Not Available</td>
</tr>
<tr>
<td>Freeze Point, °C</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition Coefficient, n-octanol/water</td>
<td>Not Available</td>
</tr>
<tr>
<td>Decomposition Temp., °C</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash Point, °C / F°</td>
<td>26 / 79</td>
</tr>
<tr>
<td>Boiling Range, °C</td>
<td>100</td>
</tr>
<tr>
<td>Explosive Limits, vol%</td>
<td>Not Available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Available</td>
</tr>
<tr>
<td>Auto-ignition Temp., °C</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

(See "Other information" Section for abbreviation legend)

### 10. Stability and reactivity

**STABILITY:** Stable under normal conditions. The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is noticeably exceeded, the product may polymerise with heat evolution.

**CONDITIONS TO AVOID:** Keep product away from heat, sparks, pilot lights, static electricity, and open flame. Avoid improper addition of promoter and/or catalyst. Avoid direct contact of MEKP catalyst with accelerator. If adding accelerator like cobalt drier, mix accelerator with base material before adding catalyst. Burning may produce obnoxious and toxic fumes. Hazardous polymerization may occur.


**HAZARDOUS DECOMPOSITION PRODUCTS:** None under normal use.

### 11. Toxicological information

**Practical Experiences**

**EFFECT OF OVEREXPOSURE - EYE CONTACT:** Exposure may cause mild irritation. Symptoms may include stinging, tearing, and redness.

**EFFECT OF OVEREXPOSURE - INGESTION:** May cause severe gastrointestinal disturbance with headache, nausea, vomiting and diarrhea.
EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system. Prolonged, repeated or high exposures may cause central nervous system depression leading to headaches, nausea, drowsiness, dizziness, and possibly narcosis. In extreme cases, may cause loss of consciousness. Ingestion of large doses may cause headaches, dizziness, nausea, vomiting, and drowsiness. Irritating to skin.

EFFECT OF OVEREXPOSURE - SKIN CONTACT: Prolonged skin contact may defat the skin and produce dermatitis.

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated or prolonged exposure may cause central nervous system damage. Prolonged skin contact may defat the skin and produce dermatitis. Prolonged or repeated exposure may cause liver and kidney effects.

CARCINOGENICITY: This product contains styrene classified by the International Agency for Research on Cancer (IARC) as 2A carcinogen. This product contains styrene, which is listed in the NTP report on carcinogens.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Contact

Acute Toxicity Values
The acute effects of this product have not been tested. Data on individual components are tabulated below:

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Name according to EEC</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Vapor LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-42-5</td>
<td>STYRENE MONOMER</td>
<td>1000 mg/kg Rat</td>
<td>N.I.</td>
<td>11.7 mg/L Rat</td>
</tr>
<tr>
<td>80-62-6</td>
<td>METHYL METHACRYLATE</td>
<td>8420 - 10000 mg/kg Rat</td>
<td>5000 - 7500 mg/kg Rabbit</td>
<td>78000 mg/l Rat</td>
</tr>
<tr>
<td>64742-95-6</td>
<td>LIGHT AROMATIC NAPTHA</td>
<td>8400 mg/kg Rat</td>
<td>&gt;2000 mg/kg Rabbit</td>
<td>N.I.</td>
</tr>
<tr>
<td>107-21-1</td>
<td>ETHYLENE GLYCOL</td>
<td>4700 mg/kg Rat</td>
<td>10600 mg/kg Rabbit</td>
<td>N.I.</td>
</tr>
</tbody>
</table>

N.I. = No Information

ECOLOGICAL INFORMATION: Ecological evaluation of this material has not been performed; however, do not allow the product to be released to the environment without governmental approval/permits. Discharge into the environment must be avoided.

DISPOSAL METHOD: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should always 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

SPECIAL TRANSPORT PRECAUTIONS: No Information

International transport regulations

<table>
<thead>
<tr>
<th>Regulatory Information:</th>
<th>UN/NA Number</th>
<th>Proper Shipping Name</th>
<th>Classes/ *PG</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CFR</td>
<td>UN1866</td>
<td>RESIN SOLUTION</td>
<td>Class 3 PGIII</td>
<td></td>
</tr>
<tr>
<td>IMO/IMDG</td>
<td>UN1866</td>
<td>RESIN SOLUTION</td>
<td>Class 3 PGIII</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>UN1866</td>
<td>RESIN SOLUTION</td>
<td>Class 3 PGIII</td>
<td></td>
</tr>
</tbody>
</table>
15. Regulatory information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA ‘Hazard Categories’ promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: Flammable (gases, aerosols, liquids, or solids), Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Specific target organ toxicity (single or repeated exposure)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE MONOMER</td>
<td>100-42-5</td>
</tr>
<tr>
<td>METHYL METHACRYLATE</td>
<td>80-62-6</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>107-21-1</td>
</tr>
</tbody>
</table>

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE MONOMER</td>
<td>100-42-5</td>
</tr>
<tr>
<td>METHYL METHACRYLATE</td>
<td>80-62-6</td>
</tr>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>107-21-1</td>
</tr>
</tbody>
</table>

TOXIC SUBSTANCES CONTROL ACT:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) regulated components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS

WARNING: Cancer - www.P65Warnings.ca.gov

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STYRENE MONOMER</td>
<td>100-42-5</td>
</tr>
<tr>
<td>ETHYLBENZENE</td>
<td>100-41-4</td>
</tr>
</tbody>
</table>

CALIFORNIA PROPOSITION 65 REPRODUCTIVE TOXINS

WARNING: Reproductive Harm - www.P65Warnings.ca.gov.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>107-21-1</td>
</tr>
<tr>
<td>METHYL ALCOHOL</td>
<td>67-56-1</td>
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</table>
### 16. Other information

<table>
<thead>
<tr>
<th><strong>Revision Date:</strong></th>
<th>8/14/2018</th>
<th><strong>Supercedes Date:</strong></th>
<th>6/19/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reason for revision:</strong></td>
<td>Updated SDS Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Datasheet produced by:</strong></td>
<td>Regulatory Department</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HMIS Ratings:**

| Health: 2* | Flammability: 3 | Reactivity: 1 | Personal Protection: N.I. | Chronic Rating: * |

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined, N.I. - No Information

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