1. Product and Company Identification

Product Name: MNCB55 –Mold Cleaner
Product Code: MNCB55
Chemical Type: Solvent Blend
Product Use: Fast evaporating Low VOC mold cleaner. Use as received.

WARNING! FLAMMABLE LIQUID AND VAPOR

Manufacturer: Plastic Process Equipment, Inc.  Revision Date: 5/3/2018
Address: 8303 Corporate Park Drive  Emergency: 1-800-262-8200 ID 1195 (USA)
Macedonia, Ohio 44056  Phone: (800) 321-0582

2. Hazards Identification

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable liquids, Category 2
Eye irritation, Category 2B
Specific target organ toxicity - single exposure, Category 3, Respiratory system, Central nervous system
Skin corrosion/irritation Category 2
Skin sensitization Category 1
Aspiration toxicity Category 1

Other Hazards
Electrostatic charge may be generated during pumping and other operations

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word  Danger

Hazard statement(s)
Highly flammable liquid and vapor.
Causes eye irritation.
May cause respiratory irritation.
May cause drowsiness and dizziness.
Causes skin irritation
May cause an allergic skin reaction
May be fatal if swallowed and enters airways

Precautionary statement(s)
Prevention:
Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ eye protection/ face protection.

Response:
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER/doctor if you feel unwell.
If eye irritation persists: Get medical advice/ attention.
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
Do NOT induce vomiting

Storage:
Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.

Disposal:
 Dispose of contents/ container to an approved waste disposal plant.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Component &amp; CAS Number</th>
<th>Volume %</th>
<th>OSHA hazard category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limonene 5989-27-5</td>
<td>30-40</td>
<td>Hazardous</td>
</tr>
<tr>
<td>Acetone 67-64-1</td>
<td>25-35</td>
<td>Hazardous</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrod. light 64742-47-8</td>
<td>25-35</td>
<td>Hazardous</td>
</tr>
</tbody>
</table>

4. First Aid Measures

General advice:
First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:
Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.

Skin contact:
Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician.
Eye contact:  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Call a physician.

Ingestion:  
Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Call a physician.

Notes to physician Treatment:
Treat symptomatically. Risk of product entering the lungs on vomiting after ingestion.

5. Fire Fighting Measures

Suitable extinguishing media:  
Cool closed containers exposed to fire with water spray. Alcohol-resistant foam  
Dry chemical Carbon dioxide (CO2)

Specific hazards during firefighting:  
Extremely flammable.  
Forms or accumulates static electricity, may cause fire or explosion.  
Vapors may form explosive mixtures with air.  
Vapors are heavier than air and may spread along floors.  
Vapors may travel to areas away from work site before igniting/flash back to vapor source.  
In case of fire hazardous decomposition products may be produced such as:  
Carbon monoxide Carbon dioxide (CO2)

Special protective equipment for firefighters:  
Wear self-contained breathing apparatus and protective suit.

Further information:  
Acetone/water solutions that contain more than 2.5% acetone have flash points. When the acetone concentration is greater than 8% (by weight) in a closed container, it would be within the flammable range and cause fire or explosion if a source of ignition were introduced.

6. Accidental Release Measures

Spill or Leak Instructions
Personal precautions:  
Wear personal protective equipment. Unprotected persons must be kept away.  
Immediately evacuate personnel to safe areas.  
Keep people away from and upwind of spill/leak.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Do not swallow.  
Do not breathe vapours or spray mist.  
Avoid contact with skin, eyes and clothing.

Environmental precautions:  
Prevent further leakage or spillage if safe to do so.  
Prevent product from entering drains.  
Discharge into the environment must be avoided.  
Do not flush into surface water or sanitary sewer system.  
Do not allow run-off from fire-fighting to enter drains or water courses.
Methods for cleaning up:
  Ventilate the area.
  No sparking tools should be used.
  Use explosion-proof equipment.
  Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations

7. Handling and Storage

Handling: FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN

Use in accordance with good work place practices. Use with adequate ventilation. Keep containers closed when not in use. Always open containers slowly to allow any excess pressure to vent. Avoid breathing vapor. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling. Decontaminate soiled clothing thoroughly before re-use. Destroy contaminated leather clothing. Material should not be dispensed from its container by pouring, except for small sample containers where fume hoods or where other ventilation is used to manage the exposure limits. The use of a drum pump is recommended for dispensing from shipping containers. This product may generate a static charge. Ground/bond equipment when transferring material to prevent potential static accumulation. Electrical equipment and circuits in all storage and handling should conform to requirements of National Electric Code (Article 500 and 501) for a hazardous location. Empty containers may contain residues from the product. Treat empty containers with the same precautions as the material last contained. Do not cut, weld or apply heat to empty containers.

Storage:
Store in a cool, dry area, away form heat or direct sunlight. Keep containers closed when not in use. Do not store with incompatible materials. Do not allow stored product to exceed 52 C(125 F) to prevent leakage or potential rupture of container from pressure and expansion. Protect from freezing temperatures.

8. Exposure Controls / Personal Protection

Protective Equipment:
Eyes:
  Do not wear contacts. Always use ANSI approved safety glasses or coverall chemical splash goggles.

Protective Clothing:
Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket. Protective gloves and chemical splash goggles should be used when handling liquid

Engineering Controls:
General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Use a NIOSH approved respirator if ventilation is not adequate to maintain exposures below TLV levels.
Respiratory Protection:
Based on workplace contaminant level and working limits of the respirator, use a respirator approved by NIOSH. The following is the minimum recommended equipment for an occupational exposure level.

For concentrations > 1 and < 10 times the occupational exposure level: Use air-purifying respirator with full facepiece and organic vapor cartridge(s) or air-purifying full facepiece respirator with an organic vapor canister or a full facepiece powered air-purifying respirator fitted with organic vapor cartridge(s). The air purifying element must have an end of service life indicator, or a documented change out schedule must be established. Otherwise, use supplied air.

For escape: Use self-contained breathing apparatus with full facepiece or any respirator specifically approved for escape.

Other Suggested Equipment:
Eye wash station and emergency showers should be available. Spill containment equipment should be available.

Discretion Advised:
Chemical Solvents Inc. takes no responsibility for determining what measures are required for personal protection in any specific application. The general information should be used with discretion.

Exposure guidelines:

<table>
<thead>
<tr>
<th>Component &amp; CAS Number</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>ACGIH CEILING</th>
<th>OSHA TWA</th>
<th>OSHA STEL</th>
<th>OSHA CEILING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACETONE 67-64-1</td>
<td>250 PPM</td>
<td>500 PPM</td>
<td>750 PPM</td>
<td></td>
<td></td>
<td>1000 PPM</td>
</tr>
<tr>
<td>Limonene 5989-27-5</td>
<td>N/E</td>
<td>N/E</td>
<td>-</td>
<td>N/E</td>
<td>N/E</td>
<td>-</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light 64742-47-8</td>
<td>200 mg/m³, (as total hydrocarbon vapor) 8 hours.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

9. Physical and Chemical Properties

Physical state: liquid

Color: colorless

Odor: sweet pungent

Odor threshold: Not determined

pH: Not Available

Density: 0.82 g/cm³

Melting point/freezing point: Not Available

Boiling point: 56.1 °C Initial

Flash point: 1 °F (-17 °C)

Evaporation Rate: Not determined

Lower explosion limit: 2 %(V) Acetone

Upper explosion limit: 12.8 %(V) Acetone

Vapor pressure: 241 hPa at 20 °C (68 °F) acetone

Water solubility: partial

Vapor Density: >1 (where air = 1)

Explosive Data: Vapors of this product may form explosive mixtures with air

Kow: Not determined

Viscosity: Not determined

Autoignition Point: Not determined

Decomposition Temp: Not determined
10. Stability and Reactivity

Stability: Stable.

Conditions to Avoid: Avoid heat, flames, sparks, and other sources of ignition.

Incompatibility: Keep away from peroxides and other polymerization initiators, oxidizing agents such as nitric acid, perchloric acid, chromium trioxide, chlorosulfonic acid, silica gel, alumina, strong acids or amines.

Hazardous combustion or decomposition products: Thermal decomposition products may include oxides of carbon.

Hazardous Polymerization: Hazardous polymerization will not occur.

11. Toxicological Information

Acetone
Acute oral toxicity: LD50: 5,800 mg/kg Species: Rat
Acute inhalation toxicity: LC50: 32000 ppm Exposure time: 4 h Species: Rat
Acute dermal toxicity: LD50: > 7,426 mg/kg Species: Guinea pig
Skin irritation: Species: Rabbit Result: Mild skin irritation Exposure time: 24 h
Eye irritation: Species: Rabbit Result: irritating Method: Draize Test.
Repeated dose toxicity:
Species: Rat NOEL: 19000 ppm Note: 8-Week Inhalation Toxicity Study 5 days/week for 8 weeks Slightly reduced weight gain compared to controls
Species: Rat NOEL: 100 mg/kg Note: 90-Day Oral Toxicity Study increased liver and kidney weights
Species: Rat Lowest observed effect level: 500 mg/kg Note: 90-Day Oral Toxicity Study increased liver and kidney weights

Limonene
Acute toxicity:
Inhalation No data available.
Eye contact No data available.
Skin contact No data available.
Ingestion Potential for aspiration if swallowed.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limonene</td>
<td>-</td>
<td>&gt; 5 g/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Myrcene</td>
<td>&gt; 5 g/kg (Rat)</td>
<td>&gt; 5 g/kg (Rabbit)</td>
<td>–</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: no data available
Serious eye damage/eye irritation: Eyes – rabbit Result: No eye irritation
Respiratory or skin sensitization – mouse Result: May cause sensitisation by skin contact.
Germ cell mutagenicity mouse lymphocyte Result: negative
Reproductive toxicity. no data available
Specific target organ toxicity - single exposure- no data available
Aspiration hazard – category 1
Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.
Chemical Name  | ACGIH | IARC  | NTP  | OSHA
--- | --- | --- | --- | ---
Limonene 5989-27-5 | - | Group 3 | - | X

Legend
- IARC (International Agency for Research on Cancer)
- Group 1 - Carcinogenic to Humans
- Group 2A - Probably Carcinogenic to Humans
- Group 2B - Possibly Carcinogenic to Humans
- Not classifiable as a human carcinogen
- OSHA (Occupational Safety and Health Administration of the US Department of Labor)
- X – Present

Symptoms
Skin disorders May cause an allergic skin reaction

**Distillates (petroleum), hydrotreated light**

LD50 Dermal Rabbit >2000 mg/kg -
LD50 Oral Rat >5000 mg/kg –
Irritation/Corrosion Not available.
Sensitization Not available.
Specific target organ toxicity (single exposure) Not available.
Specific target organ toxicity (repeated exposure) Not available

**ASPIRATION HAZARD - Category 1**
Eye contact: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
May be fatal if Ingestion: swallowed and enters airways.
Skin contact: Defatting to the skin. May cause skin dryness and irritation.
Carcinogenicity: No known significant effects or critical hazards.
Mutagenicity: No known significant effects or critical hazards.
Teratogenicity: No known significant effects or critical hazards.
Developmental effects: No known significant effects or critical hazards.
Fertility effects: No known significant effects or critical hazards.

**12. Ecological Information**

**Aquatic toxicity**

| ACETONE | 
| --- | --- |
| Non-toxic to aquatic life. (Trout) 96 hours 5,540 mg/l (Goldfish) 24 hours 5,000 mg/l (Shrimp) 24 hours 2,100 mg/l | (Bluegill sunfish) 96 hours 8,300 mg/l (Daphnia) 48 hours 10 mg/l |

**Biodegradation** Readily biodegradable.

**13. Disposal Considerations**

Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete. Note that this handling and disposal information may also apply to empty containers, liners and rinsate. State or local regulations or restrictions are complex and may differ from federal regulations. This information is intended as an aid to proper handling and disposal; the final responsibility for handling and disposal is with the owner of the waste.
14. Transport Information

US Department of Transportation
Shipping name: FLAMMABLE LIQUIDS, N.O.S.
Hazard class: 3 (Flammable Liquid)
UN/NA Number: UN 1993
Packing Group: II
Emergency Response Guide: 128

15. Regulatory Information

Environmental Regulations
SARA 302 Components:
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components:
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards:
Fire Hazard    Acute Health Hazard    Chronic Health Hazard

CERCLA Reportable Quantity: acetone 5000 lbs

California Prop. 65:
WARNING! This product contains a chemical known to the State of California to cause cancer.
Acetaldehyde 75-07-0; Benzene 71-43-2; Cumene 98-82-8
WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
Methanol 67-56-1; Benzene 71-43-2; Toluene 108-88-3

All the chemicals used in this product are TSCA listed.
Check with your local regulators to be sure all local regulations are met.

16. Other Information

Hazard ratings This information is intended solely for the use of individuals trained in the NFPA and/or HMIS systems.

NFPA: Health: 2  Flammability: 3  Reactivity: 0
HMIS: Health: 2*  Flammability: 3  Reactivity: 0
RATING: 4-EXTREME   3-HIGH   2-MODERATE   1-SLIGHT   0-INSIGNIFICANT

Note:
For industrial use only. The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Plastic Process Equipment, Inc. makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid, or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards. Possession of an MSDS does not indicate that the possessor of the MSDS was a purchaser or user of the subject product. Revision Date: 5/3/2018