

SAFETY DATA SHEET.

Issuing date 31-Jul-2015

Revision Date 30-Jan-2019

Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name EMC-18 NON FLAM MOLD CLNR

Recommended use of the chemical and restrictions on use

Product code F03994

Product Type Non-flammable aerosol
Synonyms None

Supplier's details

Recommended Use Mold Cleaner.
Uses advised against No information available

Manufacturer:
Plastic Process Equipment, Inc.
8303 Corporate Park Dr.
Macedonia, Ohio 44056
Phone: 800-321-0562

Emergency telephone number
Chemical Emergency Phone Number 1-800-535-5053

Store locked up.
Store in a well-ventilated place. Keep container tightly closed.
Protect from sunlight

Precautionary Statements - Disposal

Dispose of contents, container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

Other information

0.0000068% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight %* |
|--------------------|----------|-----------|
| TRICHLOROETHYLENE | 79-01-6 | 85-95 |
| ACETONE | 67-64-1 | 1-10 |
| CARBON DIOXIDE | 124-38-9 | 1-10 |
| 1,2-BUTYLENE OXIDE | 106-88-7 | <1 |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures for different exposure routes

| | |
|-----------------------------------|---|
| General advice | Avoid contact with eyes, skin, and clothing. Avoid breathing vapors, mist, or gas. |
| Eye contact | Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If eye irritation persists, consult a doctor. |
| Skin contact | Wash off with soap and plenty of water. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician. |
| Inhalation | Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately. |
| Ingestion | Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion. |
| Protection of First-aiders | Remove all sources of ignition. |

Most important symptoms/effects, acute and delayed

| | |
|----------------------|---|
| Main Symptoms | Causes skin and serious eye irritation. Suspected of causing genetic defects. Suspected of causing cancer. May cause respiratory irritation. May cause drowsiness or dizziness. May be fatal if swallowed and enters airways. |
|----------------------|---|

Indication of immediate medical attention and special treatment needed, if necessary

| | |
|---------------------------|------------------------|
| Notes to physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water fog.Dry chemical. Foam.Carbon dioxide (CO2). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire. Keep away from sources of ignition - No smoking.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition.

Explosion Data

Sensitivity to Mechanical Impact none.

Sensitivity to Static Discharge Yes.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use shielding to protect fire-fighters from bursting containers. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use with adequate ventilation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Report spills as required by local and federal regulations. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Should not be released into the environment.

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods for cleaning up Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, oxidizing agents.

Aerosol Level 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------------|----------------------------------|--|---|
| TRICHLOROETHYLENE 79-01-6 | STEL: 25 ppm TWA: 10 ppm | TWA: 100 ppm (vacated) TWA: 50 ppm (vacated) TWA: 270 mg/m ³ (vacated) STEL: 200 ppm (vacated) STEL: 1080 mg/m ³ Ceiling: 200 ppm | IDLH: 1000 ppm |
| ACETONE 67-64-1 | STEL: 500 ppm TWA: 250 ppm | TWA: 1000 ppm TWA: 2400 mg/m ³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m ³ (vacated) STEL: 2400 mg/m ³ The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors. (vacated) STEL: 1000 ppm | IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m ³ |
| CARBON DIOXIDE 124-38-9 | STEL: 30000 ppm TWA: 5000 ppm | TWA: 5000 ppm TWA: 9000 mg/m ³ (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m ³ (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m ³ | IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³ |

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls**Engineering Measures**

Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits. Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Tightly fitting safety goggles. Face-shield. Safety glasses with side-shields.

Skin and body protection

Wear protective gloves and additional protective clothing as necessary to prevent exposures.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

| | | | |
|-----------------------|---------|-----------------------|---------|
| Physical state | Aerosol | Odor | Solvent |
| Appearance | Clear | Odor Threshold | |
| Color | Clear | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Methods</u> |
|--|--------------------------|--|
| pH | No information available | |
| Melting/freezing point | No information available | |
| Boiling point/boiling range | | |
| Flash Point | -18_-17 °C / -0.40_1 °F | Based on lowest flashpoint of the products constituents. Additionally, propellant has no flashpoint. |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limits in Air | | |
| upper flammability limit | | |
| lower flammability limit | | |
| Vapor pressure | | |
| Vapor density | | |
| Specific Gravity | 1.373 | |
| Water solubility | No information available | |
| Partition coefficient: n-octanol/water | | |
| Autoignition temperature | No information available | |
| Decomposition temperature | | |
| Viscosity | No information available | |
| Explosive properties | | |
| <u>Other information</u> | | |
| VOC Content(%) | 89.2 | |

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides , Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

| | |
|---------------------|--|
| Inhalation | May cause respiratory irritation, May cause drowsiness or dizziness. |
| Eye contact | Causes serious eye irritation. |
| Skin contact | Causes skin irritation. |
| Ingestion | May be fatal if swallowed and enters airways. |

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|--------------------------------|----------------------|------------------------------|---------------------------------------|
| TRICHLOROETHYLENE 79-01-6 | = 4920 mg/kg (Rat) | = 29000 mg/kg (Rabbit) | = 26 mg/L (Rat) 4 h |
| ACETONE 67-64-1 | = 5800 mg/kg (Rat) | > 15700 mg/kg (Rabbit) | = 50100 mg/m ³ (Rat) 8 h |
| 1,2-BUTYLENE OXIDE 106-88-7 | = 900 mg/kg (Rat) | 1255 - 2546 mg/kg (Rabbit) | > 6300 mg/m ³ (Rat) 4 h |

Information on toxicological effects

Symptoms Causes skin and serious eye irritation. Suspected of causing genetic defects. Suspected of causing cancer. May cause drowsiness or dizziness. May cause respiratory irritation. May be fatal if swallowed and enters airways.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Irritating to skin.
Eye damage/irritation Irritating to eyes.
Sensitization Not a known sensitizer.
Germ cell mutagenicity This product contains one or more substances which are mutagenic.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|--------------------------------|-------|----------|---------------------------------|------|
| TRICHLOROETHYLENE 79-01-6 | A2 | Group 2A | Known Reasonably Anticipated | X |
| 1,2-BUTYLENE OXIDE 106-88-7 | - | Group 2B | - | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2A - Probably Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity This product contains a chemical(s) which is a known or suspected reproductive hazard .
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness or dizziness.

Specific target organ systemic toxicity (repeated exposure) No known effect based on information supplied.

Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.

Target Organ Effects Skin, Eyes, Respiratory System, and Central Nervous System.

Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

Aspiration hazard May be fatal if swallowed and enters airways.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0.0000068% of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|------------------------------|--|---|----------------------------|---|
| TRICHLOROETHYLENE 79-01-6 | 450 mg/L EC50 Desmodesmus subspicatus 96h 175 mg/L EC50 Pseudokirchneriella | 31.4 - 71.8 mg/L LC50 Pimephales promelas 96h flow-through 39 - 54 mg/L LC50 Lepomis macrochirus | - | 2.2 mg/L EC50 Daphnia magna 48h |

| | subcapitata 96h | 96h static | | |
|--------------------------------|---|--|---|---|
| ACETONE 67-64-1 | - | 4.74 - 6.33 mL/L LC50 Oncorhynchus mykiss 96h 6210 - 8120 mg/L LC50 Pimephales promelas 96h static 8300 mg/L LC50 Lepomis macrochirus 96h | - | 10294 - 17704 mg/L EC50 Daphnia magna 48h Static 12600 - 12700 mg/L EC50 Daphnia magna 48h |
| CARBON DIOXIDE 124-38-9 | - | 0.46 mg/L LC50 Oncorhynchus mykiss | - | - |
| 1,2-BUTYLENE OXIDE 106-88-7 | 500 mg/L EC50 Desmodesmus subspicatus 72h | - | - | 69.8 mg/L EC50 Daphnia magna 48h |

Persistence and degradability

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Bioaccumulation

| Chemical Name | log Pow |
|--------------------------------|---------|
| TRICHLOROETHYLENE 79-01-6 | 2.4 |
| ACETONE 67-64-1 | -0.24 |
| 1,2-BUTYLENE OXIDE 106-88-7 | 0.416 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment****Waste Disposal Methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with federal, state, and local regulations. Dispose of in accordance with local regulations. Dispose of contents/container in accordance with local regulation.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION**DOT Ground**

CONSUMER COMMODITY ORM-D
or
LIMITED QUANTITY

IATA

UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD.QTY.

IMDG

UN1950, AEROSOLS, 2.1, LTD.QTY

15. REGULATORY INFORMATION**International Inventories**

| Chemical Name | TSCA | DSL/NDSL | EINECS/ELINCS | ENCS | IECSC | KECL | PICCS | AICS |
|--------------------|------|----------|---------------|------|-------|------|-------|------|
| TRICHLOROETHYLENE | X | X | X | X | X | X | X | X |
| ACETONE | X | X | X | X | X | X | X | X |
| CARBON DIOXIDE | X | X | X | X | X | X | X | X |
| 1,2-BUTYLENE OXIDE | X | X | X | X | X | X | X | X |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

| Chemical Name | CAS-No | Weight %* | SARA 313 - Threshold Values % |
|-------------------------------|----------|-----------|-------------------------------|
| TRICHLOROETHYLENE - 79-01-6 | 79-01-6 | 85-95 | 0.1 |
| 1,2-BUTYLENE OXIDE - 106-88-7 | 106-88-7 | <1 | 0.1 |

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute Health Hazard | Yes |
| Chronic Health Star Hazard | Yes |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | Yes |
| Reactive Hazard | No |

Clean Water Act

This product does contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| TRICHLOROETHYLENE 79-01-6 | 100 lb | X | X | X |

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

| Chemical Name | Hazardous Substances RQs | Extremely Hazardous Substances RQs | RQ |
|--------------------------------|--------------------------|------------------------------------|--|
| TRICHLOROETHYLENE 79-01-6 | 100 lb | | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| ACETONE 67-64-1 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| 1,2-BUTYLENE OXIDE 106-88-7 | 100 lb | | RQ 100 lb final RQ RQ 45.4 kg final RQ |

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

| Chemical Name | California Prop. 65 |
|-----------------------------|--|
| TRICHLOROETHYLENE - 79-01-6 | Carcinogen Developmental, Male 85-95% |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|--------------|
| TRICHLOROETHYLENE 79-01-6 | X | X | X |
| ACETONE 67-64-1 | X | X | X |
| CARBON DIOXIDE 124-38-9 | X | X | X |
| 1,2-BUTYLENE OXIDE 106-88-7 | X | X | X |

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

16. OTHER INFORMATION

| | | | | |
|-----------------------------------|-------------------------|--|--------------------------|--|
| NFPA | Health Hazard 2 | Flammability 4 | Instability 0 | Physical and chemical hazards - |
| HMIS | Health Hazard 2* | Flammability 4 | Physical Hazard 1 | Personal protection B |
| <i>Chronic Hazard Star Legend</i> | | <i>Chronic Health Star Hazard Repeated or prolonged exposure may cause central nervous system damage</i> | | |

Issuing date 31-Jul-2015

Revision Date 30-Jan-2019

Revision Note
(M)SDS sections updated

Disclaimer

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

End of Safety Data Sheet