

1. Identification

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|---|--|----------------|
| Product identifier | Ultra CURB® Liquid | |
| Other means of identification | | |
| Product code | 009936 | |
| Recommended use | As a liquid mold inhibitor/surfactant. | |
| Recommended restrictions | None known. | |
| Manufacturer/Importer/Supplier/Distributor information | | |
| Manufacturer | | |
| Company name | Kemin Industries, Inc. | |
| Address | 2100 Maury Street Des Moines, Iowa 50317 United States | |
| Telephone | (515) 559-5100 | |
| Website | http://www.kemin.com/ | |
| E-mail | media@kemin.com | |
| Emergency phone number | CHEMTREC | 1-800-424-9300 |

2. Hazard(s) identification

| | | |
|------------------------------|---|---|
| Physical hazards | Flammable liquids | Category 4 |
| Health hazards | Serious eye damage/eye irritation | Category 2A |
| | Specific target organ toxicity, single exposure | Category 3 respiratory tract irritation |
| | Specific target organ toxicity, repeated exposure | Category 1 (lungs) |
| Environmental hazards | Not classified. | |
| OSHA defined hazards | Not classified. | |

Label elements



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|--|---|
| Signal word | Danger |
| Hazard statement | Combustible liquid. Causes serious eye irritation. May cause respiratory irritation. Causes damage to organs (lungs) through prolonged or repeated exposure. |
| Precautionary statement | |
| Prevention | Keep away from flames and hot surfaces-No smoking. Do not breathe mist/vapors. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection. |
| Response | If inhaled: Remove person to fresh air and keep 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 appropriate media to extinguish. |
| Storage | Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazard(s) not otherwise classified (HNOC) | None known. |
| Supplemental information | None. |

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--|--------------------------|------------|-----------|
| PROPIONIC ACID | | 79-09-4 | 70 - < 80 |
| ACETIC ACID | | 64-19-7 | 5 - < 10 |
| AMMONIUM HYDROXIDE | | 1336-21-6 | 5 - < 10 |
| BENZOIC ACID | | 65-85-0 | 5 - < 10 |
| SORBIC ACID | | 110-44-1 | 3 - < 5 |
| Other components below reportable levels | | | 5 - < 10 |

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

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| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell. |
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. |
| Ingestion | Rinse mouth. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | Nausea, vomiting. Abdominal pain. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Prolonged exposure may cause chronic effects. |
| Indication of immediate medical attention and special treatment needed | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. |
| General information | If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

5. Fire-fighting measures

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| Suitable extinguishing media | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | Combustible liquid. |

6. Accidental release measures

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| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. |

7. Handling and storage

Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Do not breathe mist/vapors. Avoid contact with eyes. Avoid prolonged exposure. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Manufacturer recommends storing above 40 F. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Components | Type | Value |
|---------------------------------------|------|----------------------|
| ACETIC ACID (CAS 64-19-7) | PEL | 25 mg/m ³ |
| | | 10 ppm |
| AMMONIUM HYDROXIDE (CAS 1336-21-6) | PEL | 35 mg/m ³ |
| | | 50 ppm |

US. ACGIH Threshold Limit Values

| Components | Type | Value |
|---------------------------------------|------|--------|
| ACETIC ACID (CAS 64-19-7) | STEL | 15 ppm |
| | TWA | 10 ppm |
| AMMONIUM HYDROXIDE (CAS 1336-21-6) | STEL | 35 ppm |
| | TWA | 25 ppm |
| Propionic Acid (CAS 79-09-4) | TWA | 10 ppm |

US. NIOSH: Pocket Guide to Chemical Hazards

| Components | Type | Value |
|---------------------------------------|------|--------------------------------|
| ACETIC ACID (CAS 64-19-7) | STEL | 37 mg/m ³ |
| | | 15 ppm |
| | TWA | 25 mg/m ³ 10 ppm |
| AMMONIUM HYDROXIDE (CAS 1336-21-6) | STEL | 27 mg/m ³ |
| | | 35 ppm |
| | TWA | 18 mg/m ³ 25 ppm |
| Propionic Acid (CAS 79-09-4) | STEL | 45 mg/m ³ |
| | | 15 ppm |
| | TWA | 30 mg/m ³ 10 ppm |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

Individual protection measures, such as personal protective equipment

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|-------------------------------|--|
| Eye/face protection | Chemical respirator with organic vapor cartridge and full facepiece. |
| Skin protection | |
| Hand protection | Wear appropriate chemical resistant gloves. |
| Other | Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended. |
| Respiratory protection | Chemical respirator with organic vapor cartridge and full facepiece. |
| Thermal hazards | Wear appropriate thermal protective clothing, when necessary. |

General hygiene considerations When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

| | |
|-----------------------|---------|
| Physical state | Liquid. |
| Form | Liquid. |
| Color | Amber |

Odor Fruit-like

Odor threshold Not available.

pH Not available.

Melting point/freezing point Not available.

Initial boiling point and boiling range Not available.

Flash point 170.0 °F (76.7 °C) Closed Cup

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure 183.7 hPa estimated

Vapor density Not available.

Relative density Not available.

Solubility(ies)

Solubility (water) Not available.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity 35 - 41 cP at 25 °C

Other information

Flammability class Combustible IIIA

Refractive index 1.42 - 1.44

Specific gravity 1.06 - 1.09

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous reactions No dangerous reaction known under conditions of normal use.

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| Conditions to avoid | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | No hazardous decomposition products are known. |

11. Toxicological information

Information on likely routes of exposure

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|---------------------|--|
| Inhalation | May cause irritation to the respiratory system. Prolonged inhalation may be harmful. |
| Skin contact | No adverse effects due to skin contact are expected. |
| Eye contact | Causes serious eye irritation. |
| Ingestion | Expected to be a low ingestion hazard. |

Symptoms related to the physical, chemical and toxicological characteristics Nausea, vomiting. Abdominal pain. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation.

Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|------------------------------|---------|-----------------------|
| BENZOIC ACID (CAS 65-85-0) | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rabbit | > 5000 mg/kg |
| Inhalation | | |
| LC50 | Rat | > 0.026 mg/l, 1 Hours |
| Oral | | |
| LD50 | Rat | 1700 mg/kg |
| PROPIONIC ACID (CAS 79-09-4) | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rat | 3235 mg/kg |
| SORBIC ACID (CAS 110-44-1) | | |
| <u>Acute</u> | | |
| Oral | | |
| LD50 | Rat | 7.36 g/kg |

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

Respiratory or skin sensitization

| | |
|----------------------------------|---|
| Respiratory sensitization | Not a respiratory sensitizer. |
| Skin sensitization | This product is not expected to cause skin sensitization. |

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity Not classifiable as to carcinogenicity to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure May cause respiratory irritation.

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| Specific target organ toxicity - repeated exposure | Causes damage to organs (lungs) through prolonged or repeated exposure. |
| Aspiration hazard | Not an aspiration hazard. |
| Chronic effects | Prolonged inhalation may be harmful. Causes damage to organs through prolonged or repeated exposure. |

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | Species | Test Results |
|---|---------|---|
| ACETIC ACID (CAS 64-19-7) | | |
| Aquatic | | |
| Crustacea | EC50 | Water flea (<i>Daphnia magna</i>) 65 mg/l, 48 hours |
| Fish | LC50 | Bluegill (<i>Lepomis macrochirus</i>) 75 mg/l, 96 hours |
| AMMONIUM HYDROXIDE (CAS 1336-21-6) | | |
| Aquatic | | |
| Fish | LC50 | Western mosquitofish (<i>Gambusia affinis</i>) 15 mg/l, 96 hours |
| BENZOIC ACID (CAS 65-85-0) | | |
| Aquatic | | |
| Fish | LC50 | Western mosquitofish (<i>Gambusia affinis</i>) 180 mg/l, 96 hours |

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

| Partition coefficient n-octanol / water (log Kow) | |
|--|-------|
| ACETIC ACID | -0.17 |
| BENZOIC ACID | 1.87 |
| SORBIC ACID | 1.33 |

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH ≤2 or ≥12.5, or corrosive to steel]
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

SORBIC ACID (CAS 110-44-1) 1.0 % One-Time Export Notification only.

CERCLA Hazardous Substance List (40 CFR 302.4)

ACETIC ACID (CAS 64-19-7) Listed.
AMMONIUM HYDROXIDE (CAS 1336-21-6) Listed.
BENZOIC ACID (CAS 65-85-0) Listed.
PROPIONIC ACID (CAS 79-09-4) Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

Classified hazard categories Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)

SARA 313 (TRI reporting)

| Chemical name | CAS number | % by wt. |
|--------------------|------------|----------|
| AMMONIUM HYDROXIDE | 1336-21-6 | 5 - < 10 |

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

ACETIC ACID (CAS 64-19-7) High priority
PROPIONIC ACID (CAS 79-09-4) High priority

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|----------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

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| Issue date | 06-01-2015 |
| Revision date | 10-31-2019 |
| Version # | 02 |
| Disclaimer | The information provided in this 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. |
| Revision information | This document has undergone significant changes and should be reviewed in its entirety. |