## Section 1. Product and Company Identification

**Product Name** Vinyl Acetate Monomer
**CAS Number** 108-05-4

**Parchem - fine & specialty chemicals**
**415 Huguenot Street**
**New Rochelle, NY 10801**
**(914) 654-6800** **(914) 654-6899**
**parchem.com** **info@parchem.com**

EMERGENCY RESPONSE NUMBER
CHEMTEL
Toll Free US & Canada: 1 (800) 255-3924
All other Origins: 1 (813) 248-0585
Collect Calls Accepted

## Section 2. Hazards Identification

**Classification of the substance or mixture**
**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**
Flammable liquids (Category 2), H225
Acute toxicity, Inhalation (Category 4), H332
Carcinogenicity (Category 2), H351
Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335
Acute aquatic toxicity (Category 3), H402
Chronic aquatic toxicity (Category 3), H412

**GHS Label Elements**
**Pictograms:**

**Signal word:** DANGER

**Hazard and precautionary statements**
**Hazard Statements**
H225 Highly flammable liquid and vapor.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H351 Suspected of causing cancer.
H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements**
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.

P233 Keep container tightly closed.
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.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/eye protection/face protection.
P281 Use personal protective equipment as required.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P312 IF INHALED: 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.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P370 + P378 In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS:** None

## Section 3. Composition / Information on Ingredients

**Common Name** Vinyl Acetate Monomer
**Synonym(s)** Acetoxyethylene
**Formula** $C_4H_6O_2$
**CAS Number** 108-05-4

| COMPONENT | CAS NUMBER | CONCENTRATION |
|---|---|---|
| Vinyl Acetate Monomer | 108-05-4 | ≤ 100% |

## Section 4. First Aid Measures

**Description of first aid measures**
**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
**Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
**Skin contact:** Wash off with soap and plenty of water. Consult a physician.
**Eye contact:** Flush eyes with water as a precaution.
**Ingestion:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most important symptoms and effects, both acute and delayed:** The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
**Indication of any immediate medical attention and special treatment needed:** No data available

## Section 5. Firefighting Measures

**Extinguishing media**
**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

**Special hazards arising from the substance or mixture:** Carbon oxides
Flash back possible over considerable distance. Container explosion may occur under fire conditions.
**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.
**Further information:** Use water spray to cool unopened containers.

## Section 6. Accidental Release Measures

**Personal precautions, protective equipment, and emergency procedures:** Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.
**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
**Methods and materials for containment and cleaning up:** Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
**Reference to other sections:** For disposal see section 13.

## Section 7. Handling and Storage

**Precautions for safe handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see section 2.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature 2 - 8°C

## Section 8. Exposure Controls / Personal Protection

**Control parameters**

**Components with workplace control parameters**

| Component | CAS Number | Value | Control Parameters | Basis |
|---|---|---|---|---|
| Vinyl Acetate | 108-05-4 | TWA | 10.000000 ppm | USA ACGIH Threshold Limit Values (TLV) |
| | Remarks | Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Skin irritation Confirmed animal carcinogen with unknown relevance to humans | | |
| | | STEL | 15.000000 ppm | USA ACGIH Threshold Limit Values (TLV) |
| | | Central Nervous System impairment Upper Respiratory Tract irritation Eye irritation Skin irritation Confirmed animal carcinogen with unknown relevance to humans | | |
| | | C | 4.000000 ppm<br>15.000000 mg/m$^3$ | USA NIOSH Recommended Exposure Limits |
| | | 15 minute ceiling value | | |

**Exposure controls**

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection:** Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body Protection:** Complete suit protecting against chemicals, Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Control of environmental exposure:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Section 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**
**Appearance:** Liquid, clear
**Color:** Colorless
**Odor:** No data available
**Odor Threshold:** No data available
**pH:** No data available
**Melting point/freezing point:** -93°C (-135°F)
**Initial boiling point and boiling range:** 72 - 73°C (162 - 163°F)
**Flash point (Closed Cup):** -7.99°C (17.62°F)
**Evaporation rate:** No data available
**Flammability (solid, gas):** No data available
**Upper/lower flammability or explosive limits**
**Upper explosion limit:** 13.4% (V)
**Lower explosion limit:** 2.6% (V)
**Vapor pressure:** No data available
**Vapor density:** 2.97 - (Air = 1.0)
**Relative density:** 0.934 g/mL at 25°C (77°F)
**Water solubility:** 20 g/l at 20°C (68°F)
**Partition coefficient (n-octanol/water):** log Pow: 3.0
**Auto-ignition temperature:** No data available
**Decomposition temperature:** No data available
**Viscosity:** No data available
**Explosive properties:** No data available
**Oxidizing properties:** No data available

**Other safety information**
**Relative vapor density:** 2.97 - (Air = 1.0)

## Section 10. Stability and Reactivity

**Reactivity:** No data available
**Chemical stability:** Stable under recommended storage conditions.
**Possibility of hazardous reactions:** Unstable upon depletion of inhibitor. Vapors may form explosive mixture with air.
**Conditions to avoid:** Heat, flames, and sparks.
**Incompatible materials:** Acids, Bases, Oxidizing agents, Peroxides

**Hazardous decomposition products**
**Other decomposition products:** No data available
In the event of fire: see section 5

## Section 11. Toxicological Information

**Information on toxicological effects**

**Acute toxicity**

LD50 Oral - Rat: 2,900 mg/kg
LC50 Inhalation - Rat: 14.1 mg/l (4h)
LD50 Dermal - Rabbit: 2,335 mg/kg
LD50 Dermal - Rabbit: 7,440 mg/kg

**Skin corrosion/irritation**

Skin - Rabbit
Result: No skin irritation
(OECD Test Guideline 404)

**Serious eye damage/eye irritation**

Eyes - Rabbit
Result: No eye irritation
(OECD Test Guideline 405)

**Respiratory or skin sensitization**

in vivo assay - Mouse
Does not cause skin sensitization.
(OECD Test Guideline 429)

**Germ cell mutagenicity**

in vitro assay
lymphocyte
Result: Equivocal evidence.
Chromosome aberration test in vitro
Other cell types
Result: positive
Result: Not mutagenic in Ames Test

**Carcinogenicity**

Limited evidence of carcinogenicity in animal studies
**IARC:** 2B - Group 2B: Possibly carcinogenic to humans (Vinyl acetate)
**NTP:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.
**OSHA:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity:** No data available
**Specific target organ toxicity - single exposure:** Inhalation - May cause respiratory irritation.
**Specific target organ toxicity - repeated exposure:** No data available

**Aspiration hazard:** No data available

**Additional Information**
**RTECS:** AK0875000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## Section 12. Ecological Information

**Toxicity**
**Toxicity to fish**
LC50 - Pimephales promelas (fathead minnow): 14 mg/l (96 h)
NOEC - Pimephales promelas (fathead minnow): 0.16 mg/l (28 d)
(OECD Test Guideline 212)
**Toxicity to daphnia and other aquatic invertebrates**
EC50 - Daphnia magna (Water flea): 12.6 mg/l (48 h)
(OECD Test Guideline 202)
**Toxicity to algae**
NOEC - Pseudokirchneriella subcapitata (green algae): 1.58 mg/l (96 h)
(OECD Test Guideline 201)
EC50 - Pseudokirchneriella subcapitata (green algae): 12.7 mg/l (96 h)
(OECD Test Guideline 201)

**Persistence and degradability**
Biodegradability Result: 82 - 98% - Readily biodegradable
(OECD Test Guideline 301C)
**Bioaccumulative potential:** No bioaccumulation is to be expected (log Pow <= 4).
**Mobility in soil:** No data available
**Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
**Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

## Section 13. Disposal Considerations

**Waste Treatment Methods:** Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

## Section 14. Transport Information

**DOT (US)**
**UN number:** 1301
**Class:** 3
**Packing group:** II
**Proper shipping name:** Vinyl acetate, stabilized

**Reportable Quantity (RQ):** 5000 lbs
**Poison Inhalation Hazard:** No

**IMDG**
**UN number:** 1301
**Class:** 3
**Packing group:** II
**EMS-No:** F-E, S-D
**Proper shipping name:** Vinyl Acetate, Stabilized

**IATA**
**UN number:** 1301
**Class:** 3
**Packing group:** II
**Proper shipping name:** Vinyl acetate, stabilized

## Section 15. Regulatory Information

**SARA 302 Components**
The following components are subject to reporting levels established by SARA Title III, Section 302:
Vinyl acetate (CAS-No. 108-05-4)
Revision Date: 2008-11-03

**SARA 313 Components**
The following components are subject to reporting levels established by SARA Title III, Section 313:
Vinyl acetate (CAS-No. 108-05-4)
Revision Date: 2008-11-03

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

**Massachusetts Right to Know Components**
Vinyl Acetate (CAS-No. 108-05-4)
Revision Date: 2008-11-03
**Pennsylvania Right to Know Components**
Vinyl Acetate (CAS-No. 108-05-4)
Revision Date 2008-11-03
**New Jersey Right to Know Components**
Vinyl Acetate (CAS-No. 108-05-4)
Revision Date: 2008-11-03

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

**HMIS Rating**
**Health:** 2*
**Flammability:** 3
**Reactivity:** 0

**NFPA Rating**
**Health:** 2
**Flammability:** 3
**Reactivity:** 0

## Section 16. Other Information

**Disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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