1 Identification

- Product identifier
- Product Name: Methyl pyrilene HCl
- Part Number: 5-2450
- Application of the substance / the mixture Certified Reference Material

- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: SPEX CertiPrep, LLC.
  203 Norcross Ave, Metuchen, NJ 08840 USA
- Information department: product safety department
- Emergency telephone number:
  Emergency Phone Number (24 hours)
  CHEMTREC (800-424-9300)
  Outside US: 703-527-3887

2 Hazard(s) identification

- Classification of the substance or mixture

- Classification of the substance or mixture
  - GHS02 Flame
    Flam. Liq. 2 H225 Highly flammable liquid and vapor.
  - GHS06 Skull and crossbones
    Acute Tox. 3 H331 Toxic if inhaled.
  - GHS08 Health hazard
    STOT SE 1 H370 Causes damage to organs.

- Label elements
  - GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
    - GHS02
    - GHS06
    - GHS08

- Signal word Danger
- Hazard-determining components of labeling: methanol
- Hazard statements
  H225 Highly flammable liquid and vapor.
  H331 Toxic if inhaled.
  H370 Causes damage to organs.
- Precautionary statements
  Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  Use explosion-proof electrical/ventilating/lighting/equipment.
  Do not breathe dust/fume/gas/mist/vapors/spray.
  If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- Classification system:
- NFPA ratings (scale 0 - 4)
  Health = 3
  Fire = 3
  Reactivity = 0
Product Name: Methyl pyrilene HCl

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Mixture of the substances listed below with nonhazardous additions.

  - Dangerous components:
    - 67-56-1 methanol 99.9%
    - 135-23-9 methapyrilene hydrochloride 0.1%

4 First-aid measures

- Description of first aid measures
- General information:
  - Immediately remove any clothing soiled by the product.
  - Remove breathing apparatus only after contaminated clothing have been completely removed.
  - In case of irregular breathing or respiratory arrest provide artificial respiration.
- After inhalation:
  - Supply fresh air or oxygen; call for doctor.
  - In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  - Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
  - Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
  - Do not induce vomiting; immediately call for medical help.
- Information for Doctor:
  - Most important symptoms and effects, both acute and delayed: No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away.
- Environmental precautions:
  - Do not allow product to reach sewage system or any water course.
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
- Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.

(Contd. on page 3)
7 Handling and storage

- Handling:
  - Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Open and handle receptacle with care.
    Prevent formation of aerosols.
  - Information about protection against explosions and fires:
    Keep ignition sources away - Do not smoke.
    Protect against electrostatic charges.
    Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: Store in a cool location.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions:
    Keep receptacle tightly sealed.
    Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
  - Components with limit values that require monitoring at the workplace:
    | 67-56-1 methanol |
    |------------------|
    | PEL | Long-term value: 260 mg/m³, 200 ppm |
    | REL | Short-term value: 325 mg/m³, 250 ppm |
  - Long-term value: 260 mg/m³, 200 ppm
    | Skin |
    | TLV | Short-term value: 328 mg/m³, 250 ppm |
    | Long-term value: 262 mg/m³, 200 ppm |
    | Skin; BEI |
  - Ingredients with biological limit values:
    | 67-56-1 methanol |
    | BEI 15 mg/L |
    | Medium: urine |
    | Time: end of shift |
    | Parameter: Methanol (background, nonspecific) |
- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures:
      - Keep away from foodstuffs, beverages and feed.
      - Immediately remove all soiled and contaminated clothing.
      - Wash hands before breaks and at the end of work.
      - Store protective clothing separately.
      - Avoid contact with the eyes and skin.
    - Breathing equipment:
      - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
    - Protection of hands:
      - Protective gloves
      The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
      Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
      Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 4)
9 Physical and chemical properties

- Information on basic physical and chemical properties
  - General Information
  - Appearance:
    - Form: Liquid
    - Color: According to product specification
    - Odor: Characteristic
    - Odour Threshold: Not applicable.
  - pH-value: Not applicable.
  - Change in condition
    - Melting point/Melting range: Undetermined.
    - Boiling point/Boiling range: 64 °C (147 °F)
  - Flash point: 11 °C (52 °F)
  - Flammability (solid, gaseous): Not applicable.
  - Ignition temperature: 455 °C (851 °F)
  - Decomposition temperature: Not applicable.
  - Auto igniting: Product is not selfigniting.
  - Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
  - Explosion limits:
    - Lower: 5.5 Vol %
    - Upper: 44.0 Vol %
  - Vapor pressure at 20 °C (68 °F): 128 hPa (96 mm Hg)
  - Density at 20 °C (68 °F): 0.78921 g/cm³ (6.586 lbs/gal)
    - Relative density: Not applicable.
    - Vapor density: Not applicable.
    - Evaporation rate: Not applicable.
  - Solubility in / Miscibility with Water: Not miscible or difficult to mix.
  - Partition coefficient (n-octanol/water): Not applicable.
  - Viscosity:
    - Dynamic: Not applicable.
    - Kinematic: Not applicable.
  - Solvent content:
    - Organic solvents: 99.9 %
    - VOC content: 99.9 %
  - Solids content: 0.1 %
  - Other information: No further relevant information available.

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known.
11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:
    - 67-56-1 methanol
      - Oral LD50: 5628 mg/kg (rat)
      - Dermal LD50: 15800 mg/kg (rabbit)
- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
The product shows the following dangers according to internally approved calculation methods for preparations:
  - Toxic

- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    None of the ingredients is listed.
  - NTP (National Toxicology Program)
    None of the ingredients is listed.
  - OSHA-Ca (Occupational Safety & Health Administration)
    None of the ingredients is listed.

12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
  - Behavior in environmental systems: No further relevant information available.
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods:
  - Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
  - DOT, ADR, IMDG, IATA: UN1230
- UN proper shipping name
  - DOT: Methanol
  - ADR: 1230 Methanol
  - IMDG, IATA: METHANOL

(Contd. on page 6)
Product Name: Methyl pyrilene HCl

- Transport hazard class(es)
  - DOT
    - Class 3 Flammable liquids
    - Label 3, 6.1
  - ADR
    - Class 3 Flammable liquids
    - Label 3+6.1
  - IMDG
    - Class 3 Flammable liquids
    - Label 3/6.1
  - IATA
    - Class 3 Flammable liquids
    - Label 3 (6.1)
  - Packing group
    - DOT, ADR, IMDG, IATA
      - II
  - Environmental hazards:
    - Not applicable.
  - Special precautions for user
    - Warning: Flammable liquids
    - Danger code (Kemler): 336
    - EMS Number: F-E,S-D
    - Stowage Category: B
    - Stowage Code: SW2 Clear of living quarters.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Not applicable.

- Transport/Additional information:
  - ADR
    - Excepted quantities (EQ)
      - Code: E2
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml
  - IMDG
    - Limited quantities (LQ)
      - Code: E2
    - Excepted quantities (EQ)
      - 1L
      - Maximum net quantity per inner packaging: 30 ml
      - Maximum net quantity per outer packaging: 500 ml

- UN "Model Regulation":
  - UN 1230 METHANOL, 3 (6.1), II

(Contd. on page 7)
### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
  - Section 355 (extremely hazardous substances):
    None of the ingredients is listed.
  - Section 313 (Specific toxic chemical listings):
    67-56-1 methanol
- **TSCA (Toxic Substances Control Act):**
  - All ingredients are listed.
- **Proposition 65**
  - Chemicals known to cause cancer:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for females:
    None of the ingredients is listed.
  - Chemicals known to cause reproductive toxicity for males:
    None of the ingredients is listed.
  - Chemicals known to cause developmental toxicity:
    67-56-1 methanol
- **Carcinogenic categories**
  - EPA (Environmental Protection Agency)
    None of the ingredients is listed.
  - TLV (Threshold Limit Value established by ACGIH)
    None of the ingredients is listed.
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    None of the ingredients is listed.
- **Protective Action Criteria for Chemicals**
  - **PAC-1:**
    67-56-1 methanol 530 ppm
  - **PAC-2:**
    67-56-1 methanol 2,100 ppm
  - **PAC-3:**
    67-56-1 methanol 200* ppm
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**
  - GHS02
  - GHS06
  - GHS08
- **Signal word** Danger
- **Hazard-determining components of labeling:** methanol
- **Hazard statements**
  - H225 Highly flammable liquid and vapor.
  - H331 Toxic if inhaled.
  - H370 Causes damage to organs.
- **Precautionary statements**
  - Keep away from heat/sparks/open flames/hot surfaces. No smoking.
  - Use explosion-proof electrical/ventilating/lighting/equipment.
  - Do not breathe dust/fume/gas/mist/vapors/spray.
  - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
  - Store locked up.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.
16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** product safety department
- **Contact:**
  SPEX CertiPrep, LLC.
  1-732-549-7144
- **Date of preparation / last revision 10/21/2016 / -**
- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - DOT: US Department of Transportation
  - IATA: International Air Transport Association
  - ACGIH: American Conference of Governmental Industrial Hygienists
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - ELINCS: European List of Notified Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - NFPA: National Fire Protection Association (USA)
  - HMIS: Hazardous Materials Identification System (USA)
  - VOC: Volatile Organic Compounds (USA, EU)
  - LC50: Lethal concentration, 50 percent
  - LD50: Lethal dose, 50 percent
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative
  - NIOSH: National Institute for Occupational Safety
  - OSHA: Occupational Safety & Health
  - TLV: Threshold Limit Value
  - PEL: Permissible Exposure Limit
  - REL: Recommended Exposure Limit
  - BEI: Biological Exposure Limit
  - Flam. Liq. 2: Flammable liquids – Category 2
  - Acute Tox. 3: Acute toxicity – Category 3
  - STOT SE 1: Specific target organ toxicity (single exposure) – Category 1

US