1 Identification

- Product identifier
  - Trade name: MILSOLVE
  - Article number: S12804
  - CAS Number: 75-09-2
  - EC number: 200-838-9
  - Index number: 602-004-00-3
- Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.
- Application of the substance / the mixture
  Laboratory chemicals
- Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Electron Microscopy Sciences
    1560 Industry Road
    USA-Hatfield, PA 19440
    Tel: 215-412-8400  Fax: 215-412-8450
    email: sgkcck@aol.com
    www.emsdiasum.com
  - Information department: Product safety department
  - Emergency telephone number:
    ChemTrec 1-800-424-9300 Contract CCN7661
    1-703-527-3887

2 Hazard(s) identification

- Classification of the substance or mixture
  - GHS08 Health hazard
  - Carc. 2 H351 Suspected of causing cancer.
- Label elements
  - GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - Hazard pictograms
  - GHS08
- Signal word Warning
- Hazard-determining components of labeling:
  - dichloromethane
- Hazard statements
  - Suspected of causing cancer.
- Precautionary statements
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - IF exposed or concerned: Get medical advice/attention.

(Contd. on page 2)
Trade name: MILSOLVE

Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- Classification system:
  - NFPA ratings (scale 0 - 4)
    - Health = 1
    - Fire = 0
    - Reactivity = 0

- HMIS-ratings (scale 0 - 4)
  - HEALTH Health = *1
  - FIRE Fire = 0
  - REACTIVITY Reactivity = 0

- Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Substances
- CAS No. Description
  - 75-09-2 dichloromethane
- Identification number(s)
  - EC number: 200-838-9
  - Index number: 602-004-00-3

4 First-aid measures

- Description of first aid measures
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult doctor.
  - 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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
- Protective equipment: No special measures required.
6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures: Not required.
- Environmental precautions: 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.
  See Section 13 for disposal information.

7 Handling and storage

- Handling:
  - Precautions for safe handling
    Ensure good ventilation/exhaustion at the workplace.
    Prevent formation of aerosols.
  - Information about protection against explosions and fires: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.
- 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:
  75-09-2 dichloromethane
  - PEL: Short-term value: 125 ppm
  - Long-term value: 25 ppm
    see 29 CFR 1910.1052
  - REL See Pocket Guide App. A
  - TLV: Long-term value: 174 mg/m³, 50 ppm
  - BEI
- Ingredients with biological limit values:
  75-09-2 dichloromethane
  - BEI: 0.3 mg/L
    Medium: urine
    Time: end of shift
    Parameter: Dichloromethane (semi-quantitative)
- Additional information: The lists that were valid during the creation were used as basis.
Trade name: MILSOLVE

· Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:
  Keep away from foodstuffs, beverages and feed.
  Wash hands before breaks and at the end of work.
· 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
· Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
· Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
· Eye protection: Goggles recommended during refilling.

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
  · Form: Liquid
  · Color: Clear
  · Odor: Ether-like
  · Odour threshold: Not determined.
  · pH-value: Not determined.
· Change in condition
  · Melting point/Melting range: -95.1 °C (-139 °F)
  · Boiling point/Boiling range: 40 °C (104 °F)
· Flash point: Not applicable.
· Flammability (solid, gaseous): Not flammable.
· Ignition temperature: 605 °C (1121 °F)
· Decomposition temperature: Not determined.
· Auto igniting: Not determined.
· Danger of explosion: Product does not present an explosion hazard.
· Explosion limits: Lower: 13 Vol %
Trade name: MILSOLVE

10 Stability and reactivity

- Reactivity
- Chemical stability
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  - Possibility of hazardous reactions: No dangerous reactions known.
  - Conditions to avoid: No further relevant information available.
  - Incompatible materials: No further relevant information available.
  - Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
  - LD/LC50 values that are relevant for classification:

| 75-09-2 dichloromethane | Oral LD50 1600 mg/kg (rat) | Inhalative LC50/4 h 88 mg/l (rat) |

- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
- Carcinogenic categories
  - IARC (International Agency for Research on Cancer)
    - 75-09-2 dichloromethane 2B
  - NTP (National Toxicology Program)
    - 75-09-2 dichloromethane R
Trade name: MILSOLVE

12 Ecological information

· Toxicity
  · Aquatic toxicity: No further relevant information available.
· Persistence and degradability No further relevant information available.
· Behavior in environmental systems:
  · Bioaccumulative potential No further relevant information available.
  · Mobility in soil No further relevant information available.
· Additional ecological information:
  · General notes:
    Water hazard class 2 (Assessment by list): hazardous for water
    Do not allow product to reach ground water, water course or sewage system.
    Danger to drinking water if even small quantities leak into the ground.
  · 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 UN1593
· UN proper shipping name
  · DOT Dichloromethane
  · ADR 1593 Dichloromethane
  · IMDG, IATA DICHLOROMETHANE
· Transport hazard class(es)
  · DOT
  · Class 6.1 Toxic substances
Trade name: MILSOLVE

- **Label**

- **ADR, IMDG, IATA**

- **Class** 6.1 Toxic substances
- **Label** 6.1

- **Packing group**
  - DOT, ADR, IMDG, IATA III

- **Environmental hazards:**
  - **Marine pollutant:** No

- **Special precautions for user**
  - **Warning:** Toxic substances

- **Danger code (Kemler):** 60
- **EMS Number:** F-A,S-A
- **Segregation groups**
  - Liquid halogenated hydrocarbons

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

- **Transport/Additional information:**

  - **DOT**
    - **Quantity limitations**
      - On passenger aircraft/rail: 60 L
      - On cargo aircraft only: 220 L
  
  - **Hazardous substance:**
    - 1000 lbs, 454 kg

- **ADR**
  - **Excepted quantities (EQ)**
    - Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

- **IMDG**
  - **Limited quantities (LQ)** 5L
  - **Excepted quantities (EQ)**
    - Code: E1
    - Maximum net quantity per inner packaging: 30 ml
    - Maximum net quantity per outer packaging: 1000 ml

- **UN "Model Regulation":** UN1593, Dichloromethane, 6.1, III

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**15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**

  - **Section 355 (extremely hazardous substances):**
    - Substance is not listed.

  - **Section 313 (Specific toxic chemical listings):**
    - Substance is listed.

  - **TSCA (Toxic Substances Control Act):**
    - Substance is listed.
Trade name: MILSOLVE

- Proposition 65
  - Chemicals known to cause cancer:
    Substance is listed.
  - Chemicals known to cause reproductive toxicity for females:
    Substance is not listed.
  - Chemicals known to cause reproductive toxicity for males:
    Substance is not listed.
  - Chemicals known to cause developmental toxicity:
    Substance is not listed.

- Carcinogenic categories
  - EPA (Environmental Protection Agency)
    75-09-2 dichloromethane
  - TLV (Threshold Limit Value established by ACGIH)
    75-09-2 dichloromethane
  - NIOSH-Ca (National Institute for Occupational Safety and Health)
    Substance is listed.

- GHS label elements
  The substance is classified and labeled according to the Globally Harmonized System (GHS).

- Hazard pictograms
  GHS08

- Signal word Warning

- Hazard-determining components of labeling:
  dichloromethane

- Hazard statements
  Suspected of causing cancer.

- Precautionary statements
  Wear protective gloves/protective clothing/eye protection/face protection.
  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
 le if exposed or concerned: Get medical advice/attention.
 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.

- Date of preparation / last revision 09/22/2015 / -
- 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

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Trade name: MILSOLVE

EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Carc. 2: Carcinogenicity, Hazard Category 2