1 Identification

- **Product name**: Mold Release Spray (Cold Mounting)
- **Part number**: 200-10010
- **Application of the substance / the mixture**: Releasing agent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  Allied High Tech Products Inc.
  2376 East Pacifica Place
  USA-RANCHO DOMINGUEZ, CA 90220
  USA
  info@alliedhightech.com
- **Information department**: Product safety department
- **Emergency telephone number**: 
  During normal opening times: +1 (310) 635-2466
  Chemtrec: +1 (202) 483-7616

2 Hazard(s) identification

- **Classification of the substance or mixture**

  ![GHS02 Flame]
  Flam. Aerosol 1 H222 Extremely flammable aerosol.

  ![GHS08 Health hazard]
  Muta. 1B H340 May cause genetic defects.
  Carc. 1B H350 May cause cancer.
  Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

  ![GHS07]
  Skin Irrit. 2 H315 Causes skin irritation.
  Eye Irrit. 2A H319 Causes serious eye irritation.
  STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
Product name: Mold Release Spray (Cold Mounting)

- **Hazard pictograms**
  - GHS02
  - GHS07
  - GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**
  - Naphtha (petroleum), hydrotreated heavy
  - di-n-butyl ether
  - Naphtha (petroleum), light alkylate

- **Hazard statements**
  - Extremely flammable aerosol.
  - Causes skin irritation.
  - Causes serious eye irritation.
  - May cause genetic defects.
  - May cause cancer.
  - May cause respiratory irritation.
  - May be fatal if swallowed and enters airways.

- **Precautionary statements**
  - Obtain special instructions before use.
  - Do not handle until all safety precautions have been read and understood.
  - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  - Do not spray on an open flame or other ignition source.
  - Pressurized container: Do not pierce or burn, even after use.
  - Avoid breathing dust/fume/gas/mist/vapors/spray
  - Wash thoroughly after handling.
  - Use only outdoors or in a well-ventilated area.
  - Wear protective gloves/protective clothing/eye protection/face protection.
  - If swallowed: Immediately call a poison center/doctor.
  - Specific treatment (see on this label).
  - Do NOT induce vomiting.
  - If on skin: Wash with plenty of water.
  - 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.
  - IF exposed or concerned: Get medical advice/attention.
  - Call a poison center/doctor if you feel unwell.
  - Take off contaminated clothing and wash it before reuse.
  - If skin irritation occurs: Get medical advice/attention.
  - If eye irritation persists: Get medical advice/attention.
  - Store in a well-ventilated place. Keep container tightly closed.
  - Store locked up.
  - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
  - Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

  - **NFPA ratings (scale 0 - 4)**
    - Health = 2
    - Fire = 0
    - Reactivity = 3

  - **HMIS-ratings (scale 0 - 4)**
    - HEALTH = 2
      - Health = *2
    - FIRE = 0
    - REACTIVITY = 3

(Contd. on page 3)
Product name: Mold Release Spray (Cold Mounting)

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

3 Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Hazardous Components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>64/42-48-9 Naphtha (petroleum), hydrotreated heavy</td>
</tr>
<tr>
<td>Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304; Flam. Liq. 4, H227</td>
</tr>
<tr>
<td>74-98-6 propane</td>
</tr>
<tr>
<td>Flam. Gas 1, H220; Press. Gas, H280</td>
</tr>
<tr>
<td>142-96-1 di-n-butyl ether</td>
</tr>
<tr>
<td>Flam. Liq. 3, H226; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; STOT SE 3, H335; Aquatic Chronic 3, H412</td>
</tr>
<tr>
<td>64741-66-8 Naphtha (petroleum), light alkylate</td>
</tr>
<tr>
<td>Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304</td>
</tr>
</tbody>
</table>

- Non-hazardous Components:
  Reaction product of tris(n-methylamino)methylsilane (TMAS) and silanol terminated polydimethylsiloxane (PDMS) 1-10%

4 First-aid measures

- Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: 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. If symptoms persist, consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    - Headache
    - Dizziness
    - Unconsciousness
    - Nausea
  - Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 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 Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:
  - 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.

(Contd. on page 4)
Product name: Mold Release Spray (Cold Mounting)

· Protective Action Criteria for Chemicals

<table>
<thead>
<tr>
<th>PAC-1:</th>
<th>Naphtha (petroleum), hydrotreated heavy</th>
<th>64742-48-9</th>
<th>350 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>propane</td>
<td>74-98-6</td>
<td>5500* ppm</td>
</tr>
<tr>
<td></td>
<td>di-n-butyl ether</td>
<td>142-96-1</td>
<td>2.6 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-2:</th>
<th>Naphtha (petroleum), hydrotreated heavy</th>
<th>64742-48-9</th>
<th>1,800 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>propane</td>
<td>74-98-6</td>
<td>17000** ppm</td>
</tr>
<tr>
<td></td>
<td>di-n-butyl ether</td>
<td>142-96-1</td>
<td>29 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PAC-3:</th>
<th>Naphtha (petroleum), hydrotreated heavy</th>
<th>64742-48-9</th>
<th>40,000 mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>propane</td>
<td>74-98-6</td>
<td>33000*** ppm</td>
</tr>
<tr>
<td></td>
<td>di-n-butyl ether</td>
<td>142-96-1</td>
<td>170 ppm</td>
</tr>
</tbody>
</table>

7 Handling and storage

· Handling:
  · Precautions for safe handling: Open and handle receptacle with care.
  · Information about protection against explosions and fires:
    Do not spray on a naked flame or any incandescent material.
    Keep ignition sources away - Do not smoke.
    Keep respiratory protective device available.

· Conditions for safe storage, including any incompatibilities

· Storage:
  · Requirements to be met by storerooms and receptacles:
    Store at temperatures not exceeding 48.8°C.
    Observe official regulations on storing packagings with pressurized containers.
  · Information about storage in one common storage facility: Not required.
  · Further information about storage conditions:
    Keep receptacle tightly sealed.
    Store receptacle in a well ventilated area.
  · 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:
  The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
  At this time, the other constituents have no known exposure limits.

<table>
<thead>
<tr>
<th>74-98-6 propane</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
</tr>
<tr>
<td>REL</td>
</tr>
<tr>
<td>TLV</td>
</tr>
</tbody>
</table>

· 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.
Product name: Mold Release Spray (Cold Mounting)

Avoid contact with the eyes and skin.
- **Breathing equipment:** Use suitable respiratory protective device when high concentrations are present.
- **Protection of hands:** Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

![Gloves]

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **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]

Tightly sealed goggles

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
  - **Appearance:**
    - **Form:** Aerosol
    - **Color:** Colorless
    - **Odor:** Mild
    - **Odor threshold:** Not determined.
  - **pH-value:** Not determined.
- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** Not applicable, as aerosol.
- **Flash point:** Not applicable, as aerosol.
- **Flammability (solid, gaseous):** Not applicable.
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Product is not selfigniting.
- **Danger of explosion:** Not determined.
- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.
- **Vapor pressure at 20 °C (68 °F):** 2,412 hPa (1.812 mm Hg)
- **Density:** Not determined.
- **Relative density**
- **Vapor density** 3.85
- **Specific gravity:** 0.74
- **Evaporation rate at 20 °C (68 °F):** 0.43 (Ether = 1)
Product name: Mold Release Spray (Cold Mounting)

· Solubility in / Miscibility with
  Water: Slightly soluble.
· Partition coefficient (n-octanol/water): Not determined.
· Viscosity:
  Dynamic: Not determined.
  Kinematic: Not determined.
· Solvent content:
  Organic solvents: 38.7 %
  VOC content: 38.73 %
  387.3 g/l / 3.23 lb/gal
· Solids content: 5.7 %
· 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.
· Conditions to avoid
  Keep away from oxidising agents and acidic substances.
  Keep away from alkaline solutions.
  Keep away from heat.
  Keep away from open flames. - No smoking.
· Incompatible materials: No further relevant information available.
· Hazardous decomposition products:
  Carbon monoxide and carbon dioxide
  Hydrocarbons
  Ammonia
· Additional information: Hazardous decomposition products may form during combustion.

11 Toxicological information
· Information on toxicological effects
· Acute toxicity:
  · LD/LC50 values that are relevant for classification:
    ATE (Acute Toxicity Estimate)
      Dermal LD50 ≥4,425 mg/kg (rab)
    64742-48-9 Naphtha (petroleum), hydrotreated heavy
      Oral LD50 ≥5,000 mg/kg (rat)
      Dermal LD50 ≥3,000 mg/kg (rab)
    142-96-1 di-n-butyl ether
      Oral LD50 7,400 mg/kg (rat)
      Dermal LD50 10,000 mg/kg (rabbit)
· Primary chemical irritant effect:
  · on the skin: Irritant to skin and mucous membranes.
  · on the eye: Irritating effect.
· Sensitization: No sensitizing effects known.
· Additional toxicological information: The product can cause inheritable damage.
Product name: Mold Release Spray (Cold Mounting)

- 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:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
- General notes:
  Water hazard class 2 (Self-assessment): 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: Contact waste processors for recycling information.

- Uncleaned packagings:
  - Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
- DOT, IMDG, IATA: UN1950

- UN proper shipping name
  - DOT: Aerosols, flammable
  - IMDG: AEROSOLS
  - IATA: AEROSOLS, flammable

- Transport hazard class(es)
  - DOT: 2.1
Product name: Mold Release Spray (Cold Mounting)

- Label 2.1
- IMDG, IATA
  - Class 2.1
  - Label 2.1

- Packing group
- DOT, IMDG, IATA not regulated
- Environmental hazards:
  - Marine pollutant: Yes
- Special precautions for user
  - Hazard identification number (Kemler code): Warning: Gases
  - EMS Number: F-D,S-U
  - Stowage Code SW1 Protected from sources of heat.
  - Segregation Code SW2 Clear of living quarters.
  - Segregation Code SG69 For AEROSOLS with a maximum capacity of 1 litre:
    Segregation as for class 9. Stow "separated from" class 1 except for
    division 1.4.
    For AEROSOLS with a capacity above 1 litre:
    Segregation as for the appropriate subdivision of class 2.
    For WASTE AEROSOLS:
    Segregation as for the appropriate subdivision of class 2.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  - Transport/Additional information: Not applicable.
    - DOT
      - Quantity limitations On passenger aircraft/rail: 75 kg
      - Limited quantities (LQ) On cargo aircraft only: 150 kg
        - 1L
      - Transport category 2
      - Tunnel restriction code D
    - IMDG
      - Limited quantities (LQ) 1L
      - Excepted quantities (EQ) Code: E0
        - Not permitted as Excepted Quantity
    - UN "Model Regulation": UN 1950 AEROSOLS, 2.1

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):
      None of the ingredients is listed.
    - TSCA (Toxic Substances Control Act):
      All components have the value ACTIVE.
Product name: Mold Release Spray (Cold Mounting)

· Hazardous Air Pollutants
  None of the ingredients is listed.

· Proposition 65
  None of the ingredients is listed.

· 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:
  None of the ingredients is listed.

· 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.

· National regulations:
· Additional classification according to Decree on Hazardous Materials: Carcinogenic hazardous material group III (dangerous).

· Information about limitation of use:
  Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· 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: Environment protection department.
· Contact: Kim Diermit
· Last revision: 05/01/2020 / 3.0

· Abbreviations and acronyms:
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
Flam. Gas 1: Flammable gases – Category 1
Flam. Aerosol 1: Aerosols – Category 1
Press. Gas: Gases under pressure – Compressed gas
Flam. Liq. 3: Flammable liquids – Category 3
Product name: Mold Release Spray (Cold Mounting)

Flam. Liq. 4: Flammable liquids – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
Muta. 1B: Germ cell mutagenicity – Category 1B
Carc. 1B: Carcinogenicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

(Contd. of page 9)