1 Identification

· Product name: Mold Release, Liquid, Hot and Cold, PTFE
· Part number: 200-10015
· 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

  GHS07
  Acute Tox. 4    H332     Harmful if inhaled.
  Skin Irrit. 2    H315     Causes skin irritation.
  Eye Irrit. 2A    H319     Causes serious eye irritation.
  STOT SE 3    H335     May cause respiratory irritation.

  Aquatic Chronic 3 H412     Harmful to aquatic life with long lasting effects.

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

  GHS07

· Signal word Warning
· Hazard-determining components of labeling:
  trans-dichloroethylene
  2h, 3h-Decafluoropentane
· Hazard statements
  Harmful if inhaled.

(Contd. on page 2)
Product name: Mold Release, Liquid, Hot and Cold, PTFE

Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
Harmful to aquatic life with long lasting effects.

· Precautionary statements
  Avoid breathing dust/fume/gas/mist/vapors/spray
  Wash thoroughly after handling.
  Use only outdoors or in a well-ventilated area.
  Avoid release to the environment.
  Wear protective gloves / eye protection / face protection.
  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.
  Call a poison center/doctor if you feel unwell.
  Specific treatment (see on this label).
  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.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:
  · NFPA ratings (scale 0 - 4)
    Health = 2
    Fire = 0
    Reactivity = 0

  · HMIS-ratings (scale 0 - 4)
    HEALTH 2
    FIRE 0
    REACTIVITY 0

· 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>
<th>Non-hazardous Components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>156-60-5 trans-dichloroethylene</td>
<td>65530-85-0 Poly-TFE (methylcyclohexyl)</td>
</tr>
<tr>
<td>138495-42-8 2h, 3h-Decafluoropentane</td>
<td></td>
</tr>
<tr>
<td>67-63-0 isopropyl alcohol</td>
<td></td>
</tr>
<tr>
<td>9002-84-0 Polytetrafluoroethylene</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>trans-dichloroethylene</td>
<td>50-100%</td>
</tr>
<tr>
<td>2h, 3h-Decafluoropentane</td>
<td>≥20-&lt;25%</td>
</tr>
<tr>
<td>isopropyl alcohol</td>
<td>≥1-&lt;10%</td>
</tr>
<tr>
<td>Polytetrafluoroethylene</td>
<td>≤1%</td>
</tr>
<tr>
<td>Poly-TFE (methylcyclohexyl)</td>
<td>1-10%</td>
</tr>
</tbody>
</table>
4 First-aid measures

· Description of first aid measures
· General information:
  Immediately remove any clothing soiled by the product.
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· After inhalation:
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  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 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: 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: Mouth respiratory protective device.

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.
  Inform respective authorities in case of seepage into water course or sewage system.
  Dilute with plenty of 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.
· Protective Action Criteria for Chemicals

| PAC-1: | 156-60-5 | trans-dichloroethylene | 280 ppm |
|        | 138495-42-8 | 2h, 3h-Decafluoropentane | 36 ppm |
|        | 67-63-0 | isopropyl alcohol | 400 ppm |
|        | 9002-84-0 | Polytetrafluoroethylene | 12 mg/m³ |

| PAC-2: | 156-60-5 | trans-dichloroethylene | 1,000 ppm |
|        | 138495-42-8 | 2h, 3h-Decafluoropentane | 400 ppm |
|        | 67-63-0 | isopropyl alcohol | 2000* ppm |
|        | 9002-84-0 | Polytetrafluoroethylene | 130 mg/m³ |

| PAC-3: | 156-60-5 | trans-dichloroethylene | 1,700 ppm |
|        | 138495-42-8 | 2h, 3h-Decafluoropentane | 500 ppm |
|        | 67-63-0 | isopropyl alcohol | 12000** ppm |

(Contd. of page 2)
7 Handling and storage

- Handling:
  - Precautions for safe handling: 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: Store at temperatures not exceeding 52°C.
  - Information about storage in one common storage facility: Not required.

- Further information about storage conditions:
  - Protect from frost.
  - 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 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.

<table>
<thead>
<tr>
<th>156-60-5 trans-dichloroethylene</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
<td>Long-term value: 790 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>REL</td>
<td>Long-term value: 790 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>TLV</td>
<td>Long-term value: 793 mg/m³, 200 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>67-63-0 isopropyl alcohol</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL</td>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>REL</td>
<td>Short-term value: 1225 mg/m³, 500 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>TLV</td>
<td>Short-term value: 984 mg/m³, 400 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 492 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>BEI</td>
<td></td>
</tr>
</tbody>
</table>

- Ingredients with biological limit values:

<table>
<thead>
<tr>
<th>67-63-0 isopropyl alcohol</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BEI</td>
<td>40 mg/L</td>
</tr>
<tr>
<td></td>
<td>Medium: urine</td>
</tr>
<tr>
<td></td>
<td>Time: end of shift at end of workweek</td>
</tr>
<tr>
<td></td>
<td>Parameter: Acetone (background, nonspecific)</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.
  - Avoid contact with the eyes and skin.

- Breathing equipment: Use suitable respiratory protective device when high concentrations are present.
Product name: Mold Release, Liquid, Hot and Cold, PTFE

- **Protection of hands:**
  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

  ![Protective gloves](image)

  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:**
  Safety glasses

  ![Tightly sealed goggles](image)

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information on basic physical and chemical properties</strong></td>
<td></td>
</tr>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td></td>
</tr>
<tr>
<td>Form: Liquid</td>
<td></td>
</tr>
<tr>
<td>Color: White</td>
<td></td>
</tr>
<tr>
<td>Odor: Light</td>
<td></td>
</tr>
<tr>
<td>Odor threshold: Not determined.</td>
<td></td>
</tr>
<tr>
<td><strong>pH-value at 20 °C (68 °F):</strong></td>
<td>7</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range: Undetermined.</td>
<td></td>
</tr>
<tr>
<td>Boiling point/Boiling range: 52 °C (125.6 °F)</td>
<td></td>
</tr>
<tr>
<td><strong>Flash point:</strong> Not applicable.</td>
<td></td>
</tr>
<tr>
<td><strong>Flammability (solid, gaseous):</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Decomposition temperature:</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Auto igniting:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower: Not determined.</td>
<td></td>
</tr>
<tr>
<td>Upper: Not determined.</td>
<td></td>
</tr>
<tr>
<td><strong>Vapor pressure at 25 °C (77 °F):</strong></td>
<td>425.3 hPa (319 mm Hg)</td>
</tr>
<tr>
<td><strong>Density:</strong> Not determined.</td>
<td></td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water:</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
</tbody>
</table>
Product name: Mold Release, Liquid, Hot and Cold, PTFE

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:
  Dynamic: Not determined.
  Kinematic: Not determined.

· Solvent content:
  Organic solvents: 72.2 %
  VOC content: 72.15 %

· Solids content: 64.8 %

· 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.
  Do not mix with alkanis.
  Keep away from heat.
  Keep away from open flames. - No smoking.
  Keep away from alkaline solutions.

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products:
  Carbon monoxide and carbon dioxide
  Hydrogen chloride (HCl)
  Hydrogen fluoride

· 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)
  Inhalative LC50/4 h 16.1 mg/l

156-60-5 trans-dichloroethylene

Oral LD50 7,902 mg/kg (rat)
Inhalative LC50/4 h 11 mg/l (ATE)

138495-42-8 2h, 3h-Decafluoropentane

Oral LD50 >5,000 mg/kg (rat)
Dermal LD50 >5,000 mg/kg (rabbit)
Inhalative LC50/4 h 114 mg/l (rat)

67-63-0 isopropyl alcohol

Oral LD50 5,045 mg/kg (rat)
Dermal LD50 12,800 mg/kg (rabbit)
Inhalative LC50/4 h 30 mg/l (rat)

9002-84-0 Polytetrafluoroethylene

Oral LD50 11,280 mg/kg (rat)

· Primary chemical irritant effect:
  · on the skin: Irritant to skin and mucous membranes.
Safety Data Sheet
acc. to OSHA HCS

Printing date 05/01/2020
Version 2.0
Last revision 05/01/2020

Product name: Mold Release, Liquid, Hot and Cold, PTFE

(on the eye: Irritating effect.
Sensitization: No sensitizing effects known.
Additional toxicological information:

Carcinogenic categories

· IARC (International Agency for Research on Cancer)
  67-63-0 isopropyl alcohol 3
  9002-84-0 Polytetrafluoroethylene 3

· 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:

156-60-5 trans-dichloroethylene

EC50 (96 h) 798 mg/l (fresh water algae)
LC50 (96 h) 74 mg/l (bluegill sunfish)
LC50 (48 h) 79 mg/l (daphnia)

138495-42-8 2h, 3b-Decafluoropentane

LC50 (96 h) 27.2 mg/l (fathead minnows)
13.9 mg/l (rainbow trout)
11.7 mg/l (daphnia)

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.
Ecotoxic effects:
Remark: Harmful to fish
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.
Harmful to aquatic organisms

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, ADN, IMDG, IATA not regulated

(Contd. on page 8)
Product name: Mold Release, Liquid, Hot and Cold, PTFE

- UN proper shipping name
  - DOT, ADN, IMDG, IATA: not regulated

- Transport hazard class(es)
  - DOT, ADN, IMDG, IATA
  - Class: not regulated

- Packing group
  - DOT, IMDG, IATA: not regulated

- Environmental hazards:
  - Marine pollutant: No

- Special precautions for user
  - Not applicable.

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

- UN "Model Regulation": not regulated

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):
    - 67-63-0 isopropyl alcohol

  - TSCA (Toxic Substances Control Act):
    - All components have the value ACTIVE.

  - Hazardous Air Pollutants
    - None of the ingredients is 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:
      - None of the ingredients is listed.

- Carcinogenic categories

  - EPA (Environmental Protection Agency)
    - 156-60-5 trans-dichloroethylene
      - II

  - TLV (Threshold Limit Value established by ACGIH)
    - 67-63-0 isopropyl alcohol
      - A4

- NIOSH-Ca (National Institute for Occupational Safety and Health)
  - None of the ingredients is listed.

- 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 Dermit
· **Last revision:** 05/01/2020 / 1.0

**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
- BEE: Biological Exposure Limit
- Flam. Liq. 2: Flammable liquids – Category 2
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A
- Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
- Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard – Category 3
- Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3