1 Identification

- Product name: Loc-tite 460 Adhesive
- Part number: 71-40045
- Application of the substance / the mixture Adhesives
- 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
  Flam. Liq. 4 H227 Combustible liquid.
  Eye Irrit. 2B H320 Causes eye irritation.
- Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- Hazard pictograms Void
- Signal word Warning
- Hazard statements
  Combustible liquid.
  Causes eye irritation.
- Precautionary statements
  Keep away from flames and hot surfaces. – No smoking.
  Wash thoroughly after handling.
  Wear protective gloves/protective clothing/eye protection/face protection.
  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
  Continue rinsing.
  If eye irritation persists: Get medical advice/attention.
  In case of fire: Use for extinction: CO2, powder or water spray.
  Store in a well-ventilated place. Keep cool.
  Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)
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>50-100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>27816-23-5 Methoxyethyl cyanoacrylate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-hazardous Components:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickener</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>Thermal additive</td>
<td>2.5-10%</td>
</tr>
</tbody>
</table>

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. 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:
  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.
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.
  Prevent seepage into sewage system, workpits and cellars.
· 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:
    None of the ingredients is listed.
  · PAC-2:
    None of the ingredients is listed.
  · PAC-3:
    None of the ingredients is listed.

7 Handling and storage

· Handling:
  · Precautions for safe handling: No special precautions are necessary if used correctly.
  · Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
· 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.
  · 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:
    27816-23-5 Methoxyethyl cyanoacrylate
    TWA Long-term value: 1.27 mg/m³
· Additional information: The lists that were valid during the creation were used as basis.
4.7. Exposure controls
4.7.1. Personal protective equipment:
4.7.1.1. 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.
Avoid contact with the eyes and skin.

4.7.2. Breathing equipment: Not required.

4.7.3. Protection of hands: Not required.

4.7.4. Material of gloves: Nitrile rubber, NBR

4.7.5. 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.

4.7.6. Eye protection:
Tightly sealed goggles

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties
9.1.1. General Information
9.1.1.1. Appearance:
Form: Liquid
Color: Clear
Odor: Nearly odorless
Odor threshold: Not determined.

9.1.1.2. pH-value: Not determined.

9.1.1.3. Change in condition
Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 149 °C (300.2 °F)

9.1.1.4. Flash point: 80 °C (176 °F)

9.1.1.5. Flammability (solid, gaseous): Not applicable.

9.1.1.6. Ignition temperature: 485 °C (905 °F)

9.1.1.7. Decomposition temperature: Not determined.

9.1.1.8. Auto igniting: Product is not selfigniting.


9.1.1.10. Explosion limits:
Lower: Not determined.
Upper: Not determined.

9.1.1.11. Vapor pressure at 20 °C (68 °F): 0.2 hPa (0.2 mm Hg)


9.1.1.14. Vapor density: 3
Product name: Loc-tite 460 Adhesive

- Specific gravity: 1.1 (Water = 1)
- Evaporation rate: Not determined.
- Solubility in / Miscibility with Water: Not miscible or difficult to mix.
- Partition coefficient (n-octanol/water): Not determined.
- Viscosity:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- Solvent content:
  - VOC content: 0.00 %
  - 0.0 g/l / 0.00 lb/gl
- 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
  - Reacts with water.
  - Danger of polymerization.
- Conditions to avoid
  - Water
  - Alcohol
  - Do not mix with alkalis.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary chemical irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:
- 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 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: 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
· UN proper shipping name
  · DOT, ADN, IMDG, IATA: not regulated
· Transport hazard class(es)
  · DOT, ADN, IMDG, IATA: not regulated
· Packing group
  · DOT, IMDG, IATA: not regulated
· Environmental hazards:
  · Marine pollutant: No
· Special precautions for user
  · 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):
    None of the ingredients is listed.
- TSCA (Toxic Substances Control Act):
  - 27816-23-5 Methoxyethyl cyanoacrylate
- TSCA new (21st Century Act) (Substances not listed)
  - Thickener
  - Thermal additive
- 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)
    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.
- 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
- Date of preparation / last revision 06/13/2018 / -
- 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)
**Product name: Loc-tite 460 Adhesive**

NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
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. Liq. 4: Flammable liquids – Category 4
Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B