1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Loctite® Super Glue Plastic Bonder-Glue
IDH number: 681925
Product type: Cyanoacrylate

Company address: Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

Issue date: 08/22/2011

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Physical state: Liquid
Color: Colorless, Transparent
Odor: Sharp, Irritating

HMIS:
HEALTH: 2
FLAMMABILITY: 2
PHYSICAL HAZARD: 1

Personal Protection: See MSDS Section 8

WARNING: BONDS SKIN IN SECONDS.
MAY CAUSE EYE AND RESPIRATORY TRACT IRRITATION.
COMBUSTIBLE LIQUID AND VAPOR.

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects

Inhalation: Exposure to vapors above the established exposure limit results in respiratory irritation, which may lead to difficulty in breathing and tightness in the chest.

Skin contact: Bonds skin in seconds. May cause skin irritation. Cyanoacrylates have been reported to cause allergic reaction but due to rapid polymerization at the skin surface, an allergic response is rare. Cyanoacrylates generate heat on solidification. In rare circumstances a large drop will burn the skin. Cured adhesive does not present a health hazard even if bonded to the skin. Irritating to eyes. Causes excessive tearing. Eyelids may bond.

Eye contact: Not expected to be harmful by ingestion. Rapidly polymerizes (solidifies) and bonds in mouth. It is almost impossible to swallow.

Existing conditions aggravated by exposure: Eye, skin, and respiratory disorders.

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl 2-cyanoacrylate</td>
<td>7085-85-0</td>
<td>60 - 100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: Move to fresh air. If symptoms persist, seek medical advice.
Skin contact: Do not pull bonded skin apart. Soak in warm soapy water. Gently peel apart using a blunt instrument. If skin is burned due to the rapid generation of heat by a large drop, seek medical attention. If lips are bonded, apply warm water to the lips and encourage wetting and pressure from saliva in mouth. Peel or roll lips apart. Do not pull lips apart with direct opposing force.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. Get medical attention. If eyelids are bonded closed, release eyelashes with warm water by covering with a wet pad. Do not force eye open. Cyanoacrylate will bond to eye protein and will cause a lacrimary effect which will help to debond the adhesive. Keep eye covered until debonding is complete, usually within 1-3 days. Medical attention should be sought in case solid particles of polymerized cyanoacrylate trapped behind the eyelid caused abrasive damage.

Ingestion: Ensure breathing passages are not obstructed. The product will polymerize rapidly and bond to the mouth making it almost impossible to swallow. Saliva will separate any solidified product in several hours. Prevent the patient from swallowing any separated mass.

Notes to physician: Surgery is not necessary to separate accidentally bonded tissues. Experience has shown that bonded tissues are best treated by passive, non-surgical first aid. If rapid curing has caused thermal burns they should be treated symptomatically after adhesive is removed.

5. FIRE FIGHTING MEASURES

Flash point: 80 - 93.4 °C (176°F - 200.12 °F) Tagliabue closed cup
Autoignition temperature: 485 °C (905°F)
Flammable/Explosive limits - lower: Not determined
Flammable/Explosive limits - upper: Not determined
Extinguishing media: Dry powder. foam Carbon dioxide.
Special firefighting procedures: Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Unusual fire or explosion hazards: Not available.
Hazardous combustion products: Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is recommended.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Do not allow product to enter sewer or waterways.
Clean-up methods: Do not use cloths for mopping up. Flood with water to complete polymerization and scrape off the floor. Cured material can be disposed of as non-hazardous waste.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists of this product. Wash thoroughly after handling. Avoid contact with fabric or paper goods. Contact with these materials may cause rapid polymerization which can generate smoke and strong irritating vapors, and cause thermal burns.
Storage: Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life contact Henkel Customer Service at (800) 243-4874.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl 2-cyanoacrylate</td>
<td>0.2 ppm TWA</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Engineering controls:**
Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.

**Respiratory protection:**
Use NIOSH approved respirator if there is potential to exceed exposure limit(s).

**Eye/face protection:**
Safety goggles or safety glasses with side shields.

**Skin protection:**
Use nitrile gloves and aprons as necessary to prevent contact. Do not use PVC, nylon or cotton.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical state:** Liquid
- **Color:** Colorless, Transparent
- **Odor:** Sharp, Irritating
- **Odor threshold:** 1 - 2 ppm
- **pH:** Not applicable
- **Vapor pressure:** < 0.2 mm hg
- **Boiling point/range:** > 149 °C (> 300.2 °F)
- **Melting point/range:** Not determined
- **Specific gravity:** 1.05
- **Vapor density:** Approximate 3
- **Flash point:** 80 - 93.4 °C (176°F - 200.12 °F) Tagliabue closed cup
- **Flammable/Explosive limits - lower:** Not determined
- **Flammable/Explosive limits - upper:** Not determined
- **Autoignition temperature:** 485 °C (905°F)
- **Evaporation rate:** Not applicable
- **Solubility in water:** Polymerises in presence of water.
- **Partition coefficient (n-octanol/water):** Not available.
- **VOC content:** < 2 %; < 20 g/l (California SCAQMD Method 316B) (Estimated)

10. STABILITY AND REACTIVITY

- **Stability:** Stable under recommended storage conditions.
- **Hazardous reactions:** Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols.
- **Hazardous decomposition products:** None
- **Incompatible materials:** Water, Amines, Alkalis, Alcohols.
- **Conditions to avoid:** Spontaneous polymerization.
11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl 2-cyanoacrylate</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Health Effects/Target Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethyl 2-cyanoacrylate</td>
<td>Irritant, Allergen, Respiratory</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Recommended waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The shipping classification in this section are for bulk packaging only. Shipping classification may be different for non-bulk packaging as exceptions may apply. Refer to shipping documents for package specific transportation classification.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Combustible liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III
Exceptions: (Not more than 450 Liters), Unrestricted

International Air Transportation (ICAO/IATA)

Proper shipping name: Aviation regulated liquid, n.o.s. (Cyanoacrylate ester)
Hazard class or division: 9
Identification number: UN 3334
Packing group: None
Exceptions: (Not more than 500ml) Unrestricted

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification: None above reporting de minimus
CERCLA/SARA Section 302 EHS: Hydroquinone (CAS# 123-31-9), Boron trifluoride (CAS# 7637-07-2).
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire, Reactive
CERCLA/SARA 313: None above reporting de minimus
California Proposition 65: No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

WHMIS hazard class: B.3, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: Karim Nasr, Regulatory Affairs Specialist

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation does not assume responsibility for any results obtained by persons over whose methods Henkel Corporation has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any of Henkel Corporation's products. In light of the foregoing, Henkel Corporation specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation further disclaims any liability for consequential or incidental damages of any kind, including lost profits.
1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Loctite Super Glue All Plastics, Activator
IDH number: 681925
Product type: Adhesive
Region: United States
Company address: Henkel Corporation
One Henkel Way
Rocky Hill, Connecticut 06067

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Hazards:
- DANGER:
- EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE.
- HARMFUL IF SWALLOWED OR INHALED.
- MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Personal Protection:
See MSDS Section 8

Relevant routes of exposure:
- Inhalation, Eyes, Ingestion, Skin

Potential Health Effects

Inhalation:
Irritates the nose, throat and respiratory system. Exposure to high doses may cause central nervous system depression. Such doses may also cause adverse effects in the liver, kidneys, and lungs. Reports have associated repeated and prolonged overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Skin contact:
Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.

Eye contact:
Contact with eyes can cause eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Ingestion:
Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Existing conditions aggravated by exposure:
- Eye, skin and respiratory disorders.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane</td>
<td>142-82-5</td>
<td>60 - 100</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

Inhalation: If inhaled, immediately remove the affected person to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms develop and persist, get medical attention.

Skin contact: Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

Eye contact: In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

Ingestion: Do not induce vomiting, seek medical advice immediately.

5. FIRE FIGHTING MEASURES

Flash point: -1.00 °C (30.2 °F) Supplier method

Autoignition temperature: Not available.

Flammable/Explosive limits - lower: 1 %

Flammable/Explosive limits - upper: 7 %

Extinguishing media: Foam, dry chemical or carbon dioxide. In case of fire, keep containers cool with water spray.

Special firefighting procedures: Wear a self-contained breathing apparatus with a full face piece operated in pressure-demand or other positive pressure mode. Wear full protective clothing.

Unusual fire or explosion hazards: Closed containers may explode when exposed to extreme heat. Vapors may form explosive mixtures with air. Vapors are heavier than air and may travel along floor to an ignition source.

Hazardous combustion products: Not available.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental precautions: Eliminate all sources of ignition or flammables that may come into contact with a spill of this material. Ventilate area.

Clean-up methods: Absorb spill with inert material. Shovel material into appropriate container for disposal. Wear suitable protective clothing, gloves and eye/face protection.

7. HANDLING AND STORAGE

Handling: Do not pressurize, cut, heat or weld containers. Empty product containers may contain product residue. Do not reuse empty containers. Use only in well-ventilated areas. Keep out of the reach of children.

Storage: Keep away from heat, spark and flame. Keep containers closed when not in use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.
Engineering controls: Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection: Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists. When workplace hazards warrant the use of a respirator, appropriate respirators must be used, and a program that follows 29 CFR 1910.134 must be followed.

Eye/face protection: Safety goggles or safety glasses with side shields.

Skin protection: Suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Cloth impregnated with a liquid
Color: Not available.
Odor: Aliphatic
Odor threshold: Not applicable
pH: Not available.
Vapor pressure: Not available.
Boiling point/range: 96.0 - 98.0 °C (204.8 - 208.4 °F)
Melting point/ range: Not available.
Specific gravity: 0.6840
Vapor density: 3.4500 Heavier than air
Flash point: -1.00 °C (30.2 °F) Supplier method
Flammable/Explosive limits - lower: 1 %
Flammable/Explosive limits - upper: 7 %
Autoignition temperature: Not available.
Evaporation rate: 2.70 (Butyl acetate = 1)
Solubility in water: Insoluble
Partition coefficient (n-octanol/water): Not available.
VOC content: Not available.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.
Hazardous reactions: Will not occur.
Hazardous decomposition products: Not available.
Conditions to avoid: Heat, flames, sparks and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Health Effects/Target Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Heptane</td>
<td>Central nervous system, Irritant</td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

Hazardous waste number: It is the responsibility of the user to determine if an item is hazardous as defined in the Resource Conservation and Recovery Act (RCRA) at the time of disposal. Product uses, transformations, mixtures, processes, etc., may render the resulting material hazardous, under the criteria of ignitability, corrosivity, reactivity and toxicity characteristics of the Toxicity Characteristics Leaching Procedure (TCLP) 40 CFR 261.20-24.

14. TRANSPORT INFORMATION

The shipping classification in this section are for bulk packaging only. Shipping classification may be different for non-bulk packaging as exceptions may apply. Refer to shipping documents for package specific transportation classification.

U.S. Department of Transportation Ground (49 CFR)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None
Exceptions: Consumer Commodity, ID 8000, Class 9

International Air Transportation (ICAO/IATA)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None

Water Transportation (IMO/IMDG)

Proper shipping name: Not regulated
Hazard class or division: None
Identification number: None
Packing group: None
Exceptions: Limited quantity (Not more than 5 L).

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.
TSCA 12(b) Export Notification: None above reporting de minimus
CERCLA/SARA Section 302 EHS: None above reporting de minimus
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
CERCLA/SARA 313: None above reporting de minimus
California Proposition 65: This product contains a chemical known in the State of California to cause cancer. This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: New Material Safety Data Sheet format.

Prepared by: Karim Nasr, Regulatory Affairs Specialist

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