



### **Revision Date: 08/08/2005**

Issue date: 08/09/2005

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

 Product name:
 415 Super Bonder® Instant Adhesive

 Product type:
 Cyanoacrylate

 Company address:
 Henkel Corporation

 1001 Trout Brook Crossing
 Rocky Hill, Connecticut 06067

| Item No. :                        | 41550         |
|-----------------------------------|---------------|
| Region:                           | United States |
| <b>Contact Information</b>        | :             |
| Telephone: 860.571.5              | 5100          |
| Emergency telephone: 860.571.5100 |               |
| Internet: www.loctite.c           | com           |

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components Methyl 2-cyanoacrylate 137-05-3 <u>%</u> 60-100 ACGIH TLV 0.2 ppm TWA OSHA PEL None

OTHER None

# 3. HAZARDS IDENTIFICATION

| EMERGENCY OVERVIEW                         |                                               |                                                                                                                                                                   |                                                                                                                                                                                                                                           |                                                |
|--------------------------------------------|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
|                                            |                                               |                                                                                                                                                                   | HMIS:                                                                                                                                                                                                                                     |                                                |
| Physical state:<br>Color:<br>Odor:         | Liquid<br>Clear Colorless to St<br>Negligible | raw                                                                                                                                                               | HEALTH:<br>FLAMMABILITY:<br>PHYSICAL HAZARD:<br>Personal Protection:                                                                                                                                                                      | 2<br>2<br>1<br>See Section 8                   |
| WARNING                                    | MAY CAU                                       | KIN IN SECONDS.<br>SE EYE AND RESPIRAT<br>FIBLE LIQUID AND VAPO                                                                                                   | • • • • • • • • • • • • • • • •                                                                                                                                                                                                           |                                                |
| Relevant routes of                         | exposure:                                     | Skin, Inhalation, Eyes                                                                                                                                            |                                                                                                                                                                                                                                           |                                                |
| Potential Health Effe                      | ects_                                         |                                                                                                                                                                   |                                                                                                                                                                                                                                           |                                                |
| Inhalation:                                |                                               | Exposure to vapors above the to difficulty in breathing and tight                                                                                                 |                                                                                                                                                                                                                                           | in respiratory irritation which may lead       |
| Skin contact<br>Eye contact:<br>Ingestion: |                                               | Bonds skin in seconds. May c<br>reaction but due to rapid polyr<br>Cyanoacrylates generate hea<br>Cured adhesive does not pres<br>Irritating to eyes. Causes exce | ause skin irritation. Cyanoacrylate<br>merization at the skin surface, an a<br>t on solidification. In rare circumsta<br>sent a health even if bonded to the<br>essive tearing. Eyelids may bond.<br>y ingestion. Rapidly polymerizes (se | nces a large drop will burn the skin.<br>skin. |
| Existing conditions exposure:              | aggravated by                                 | Eye, skin, and respiratory disc                                                                                                                                   |                                                                                                                                                                                                                                           |                                                |
|                                            |                                               | See Section 11 for additiona                                                                                                                                      | al toxicological information.                                                                                                                                                                                                             |                                                |

## **4. FIRST AID MEASURES**

| Inhalation:                                                                                     | Remove to fresh air. If discomfort persists seek medical attention.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 lachrymatory 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°C (176°F) to 93.4°C (200°F) Tagliabue closed cup                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Autoignition temperature:                                                                       | Not determined                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Flammable/Explosive limits-lower %:                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                 | Not determined                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Flammable/Explosive limits-upper %:                                                             | Not determined                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Flammable/Explosive limits-upper %:<br>Extinguishing media:                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                 | Not determined                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Extinguishing media:                                                                            | Not determined<br>Dry powder. Foam. Carbon dioxide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Extinguishing media:<br>Special fire fighting procedures:                                       | Not determined<br>Dry powder. Foam. Carbon dioxide.<br>Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).                                                                                                                                                                                                                                                                                                                                                                                                  |
| Extinguishing media:<br>Special fire fighting procedures:<br>Unusual fire or explosion hazards: | Not determined<br>Dry powder. Foam. Carbon dioxide.<br>Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).<br>None<br>Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is                                                                                                                                                                                                                                                                                  |
| Extinguishing media:<br>Special fire fighting procedures:<br>Unusual fire or explosion hazards: | Not determined<br>Dry powder. Foam. Carbon dioxide.<br>Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).<br>None<br>Trace amounts of toxic and/or irritating fumes may be released and the use of breathing apparatus is<br>recommended.                                                                                                                                                                                                                                                                  |

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 vapor and mist. 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.                                                                                                                                                                    |
| Incompatible products: | No special restrictions on storage with other products.                                                                                                                                                                                                                                           |
|                        | For information on product shelf life contact Henkel Customer Service at (800) 243-4874.                                                                                                                                                                                                          |
|                        |                                                                                                                                                                                                                                                                                                   |
|                        | 8. EXPOSURE CONTROLS / PERSONAL PROTECTION                                                                                                                                                                                                                                                        |
| Engineering controls:  | 8. EXPOSURE CONTROLS / PERSONAL PROTECTION Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.                                                                                                  |

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

Chemical splash goggles or safety glasses with side shields.

See Section 2 for exposure limits.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical state:<br>Color:<br>Odor:<br>Odor Threshold:<br>Vapor pressure:<br>pH:<br>Boiling point/range:<br>Melting point/range:<br>Specific gravity:<br>Vapor density:<br>Evapor density:<br>Evaporation rate:<br>Solubility in water:<br>Partition coefficient (n-octanol/water): | Liquid<br>Clear Colorless to Straw<br>Negligible<br>1-2 ppm<br>Less than 0.2 mm Hg<br>Not applicable<br>Greater than 149°C (300°F)<br>Not determined<br>1.09 at 23.9°C (75°F)<br>Not available<br>Not available<br>Polymerizes in presence of water<br>Not applicable |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOC content:                                                                                                                                                                                                                                                                       | Less than 2%; 20 g/L (California SCAQMD Method 316B) (estimated)                                                                                                                                                                                                      |

# **10. STABILITY AND REACTIVITY**

| Stability:                        | Stable under recommended storage conditions                                                        |  |
|-----------------------------------|----------------------------------------------------------------------------------------------------|--|
| Hazardous polymerization:         | Rapid exothermic polymerization will occur in the presence of water, amines, alkalis and alcohols. |  |
| Hazardous decomposition products: | None                                                                                               |  |
| Incompatability:                  | Water, amines, alkalis and alcohols.                                                               |  |
| Conditions to avoid:              | Spontaneous polymerization                                                                         |  |
| 11. TOXICOLOGICAL INFORMATION     |                                                                                                    |  |
| Product toxicity data:            | Acute oral LD50 >5000mg/kg (rat)(estimated). Acute dermal LD50 >2000mg/kg (rabbit)(estimated).     |  |
|                                   | Carcinogen Status                                                                                  |  |
|                                   |                                                                                                    |  |

Item No. : 41550 Product name: 415 Super Bonder® Instant Adhesive

| Hazardous components   | NTP Carcinogen | IARC Carcinogen | OSHA Carcinogen |
|------------------------|----------------|-----------------|-----------------|
| Methyl 2-cyanoacrylate | No             | No              | No              |
| 137-05-3               |                |                 |                 |

#### Literature Referenced Target Organ & Other Health Effects

| Hazardous components   | Health Effects/Target Organs    |
|------------------------|---------------------------------|
| Methyl 2-cyanoacrylate | Allergen, Irritant, Respiratory |
| 137-05-3               |                                 |

## **12. ECOLOGICAL INFORMATION**

**Ecological information:** 

Not known

## **13. DISPOSAL CONSIDERATIONS**

#### Information provided is for unused product only.

EPA hazardous waste number: Not a RCRA hazardous waste.

## **14. TRANSPORT INFORMATION**

| U.S. Department of Transportation Grou                                                                                                                        | Ind (49 CFR):                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Proper shipping name:                                                                                                                                         | Combustible liquids, n.o.s. (Cyanoacrylate ester)                           |
| Hazard class or division:                                                                                                                                     | Combustible liquid                                                          |
| Identification number:                                                                                                                                        | NA 1993                                                                     |
| Packing group:                                                                                                                                                | None                                                                        |
| <i>Exceptions:</i>                                                                                                                                            | (Not more than 450 Liters) Unrestricted                                     |
| Marine pollutant:                                                                                                                                             | None                                                                        |
| International Air Transportation (ICAO/I                                                                                                                      | ATA):                                                                       |
| Proper shipping name:                                                                                                                                         | Aviation regulated liquids, n.o.s (Cyanoacrylate ester) Greater than 500 ml |
| Hazard class or division:                                                                                                                                     | 9                                                                           |
| Identification number:                                                                                                                                        | UN 3334                                                                     |
| Packing group:                                                                                                                                                | None                                                                        |
| <i>Exceptions:</i>                                                                                                                                            | (Not more than 500ml) Unrestricted                                          |
| <u>WaterTransportation (IMO/IMDG):</u><br>Proper shipping name:<br>Hazard class or division:<br>Identification number:<br>Packing group:<br>Marine pollutant: | Unrestricted<br>None<br>None<br>None<br>None                                |

#### United States Regulatory Information

| 16. OTHER INFORMATION                                                                    |                                                                                                                                                                                                                                                                              |  |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| CEPA DSL/NDSL Status:<br>WHMIS hazard class:                                             | All components are listed on or are exempt from listing on the Domestic Substances List.<br>B.3, D.2.B                                                                                                                                                                       |  |
| Canada Regulatory Information                                                            |                                                                                                                                                                                                                                                                              |  |
| California Proposition 65:                                                               | No California Proposition 65 listed chemicals are known to be present.                                                                                                                                                                                                       |  |
| CERCLA/SARA Section 302 EHS:<br>CERCLA/SARA Section 311/312:<br>CERCLA/SARA 313:         | None.<br>Immediate Health Hazard, Delayed Health Hazard, Fire, Reactive<br>This product contains the following toxic chemicals subject to the reporting requirements of section 313<br>of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). None. |  |
| TSCA 8 (b) Inventory Status:<br>TSCA 5 (a) (2) SNUR:<br>TSCA 12 (b) Export Notification: | All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.<br>None.<br>None.                                                                                                                                                        |  |

This material safety data sheet contains changes from the previous version in sections: 9

Prepared by:

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