



Revision Number: 002.0

Issue date: 01/12/2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE® 404™ INSTANT ADHESIVE
QUICK SET™ P/N 46551

Product type: Cyanoacrylate

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

IDH number: 135465

Item number: 46551
Region: United States

Contact information:
Telephone: 860.571.5100
Emergency telephone: 860.571.5100 MEDICAL EMERGENCY
Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

Physical state:	Liquid	HEALTH:	2
Color:	Clear, Colorless	FLAMMABILITY:	2
Odor:	Sharp, Irritating	PHYSICAL HAZARD:	1
		Personal Protection:	See MSDS Section 8

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

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.

Eye contact: Irritating to eyes. Causes excessive tearing. Eyelids may bond.

Ingestion: 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 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

Hazardous components	CAS NUMBER	%
Ethyl 2-cyanoacrylate	7085-85-0	60 - 100
Hydroquinone	123-31-9	0.1 - 1

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 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 - 93.3 °C (176°F - 199.94 °F) Tagliabue closed cup
Autoignition temperature:	485 °C (905°F)
Flammable/Explosive limits - lower:	Not determined
Flammable/Explosive limits - upper:	Not determined
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).
Unusual fire or explosion hazards:	None
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:	Ventilate area.
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:	Prevent contact with eyes, skin and clothing. Do not breathe 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.

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.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Ethyl 2-cyanoacrylate	0.2 ppm TWA	None	None	None
Hydroquinone	1 mg/m3 TWA (Sensitiser.)	2 mg/m3 TWA	None	None

Engineering controls:	Use positive down-draft exhaust ventilation if general ventilation is insufficient to maintain vapor concentration below established exposure limits.
Respiratory protection:	Use a NIOSH approved supplied air respirator with an organic cartridge if the potential to exceed established exposure limits exists.
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:	Clear, Colorless
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:	1.09 at 23.9 °C (75.02 °F)
Vapor density:	3 Approximately
Flash point:	80 - 93.3 °C (176°F - 199.94 °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 available.
Solubility in water:	Polymerises in presence of water.
Partition coefficient (n-octanol/water):	Not determined
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 and alcohols.
Conditions to avoid:	Spontaneous polymerization.

11. TOXICOLOGICAL INFORMATION

Acute oral product toxicity:	LD50 (rat) > 5,000 mg/kg (Estimated)
Acute dermal product toxicity:	LD50 (rabbit) > 2,000 mg/kg (Estimated)

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Ethyl 2-cyanoacrylate	No	No	No
Hydroquinone	No	No	No

Hazardous components	Health Effects/Target Organs
Ethyl 2-cyanoacrylate	Irritant, Allergen, Respiratory
Hydroquinone	Blood, Bone Marrow, Central nervous system, Developmental, Eyes, Immune system, Irritant, Liver, Mutagen, Skin, Thyroid

12. ECOLOGICAL INFORMATION

Ecological information:	Not known.
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13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal:	Follow all local, state, federal and provincial regulations for disposal.
Hazardous waste number:	Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

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
DOT Reportable quantity:	Hydroquinone
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).
CERCLA/SARA Section 311/312:	Immediate Health, Delayed Health, Fire, Reactive
CERCLA/SARA 313:	None above reporting de minimus
CERCLA Reportable quantity:	Hydroquinone (CAS# 123-31-9) 100 lbs. (45.4 kg)
California Proposition 65:	No California Proposition 65 listed chemicals are known to be present.

Canada Regulatory Information

CEPA DSL/NDL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.
WHMIS hazard class:	B.3, D.2.A, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Updated Contact Information in Section 1., Reviewed MSDS. Reissued with new date.

Prepared by: Kyra Kozak Woods, Manager, Regulatory Affairs

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Revision Number: 004.0

Issue date: 08/25/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Water Proofing Solution
Product type: Coating
Restriction of Use: None identified
Company address:
 Henkel Corporation
 One Henkel Way
 Rocky Hill, Connecticut 06067

IDH number: 135538
Item number: 74126
Region: United States
Contact information:
 Telephone: (860) 571-5100
 MEDICAL EMERGENCY Phone: Poison Control Center
 1-877-671-4608 (toll free) or 1-303-592-1711
 TRANSPORT EMERGENCY Phone: CHEMTREC
 1-800-424-9300 (toll free) or 1-703-527-3887
 Internet: www.henkelna.com

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER: HIGHLY FLAMMABLE LIQUID AND VAPOR.
 MAY BE FATAL IF SWALLOWED AND ENTERS AIRWAYS.
 CAUSES SKIN IRRITATION.
 CAUSES SERIOUS EYE IRRITATION.
 MAY CAUSE DROWSINESS OR DIZZINESS.

HAZARD CLASS	HAZARD CATEGORY
FLAMMABLE LIQUID	2
SKIN IRRITATION	2
EYE IRRITATION	2A
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	3
ASPIRATION HAZARD	1

PICTOGRAM(S)



Precautionary Statements

Prevention: Keep away from heat, sparks, open flames, hot surfaces - no smoking. Keep container tightly closed. No release into water. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing vapors, mist, or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection.

Response: IF SWALLOWED: Immediately call a physician or poison control center. If on skin (or hair): Take off immediately all contaminated clothing. 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 remove. Continue rinsing. Call a poison control center or physician if you feel unwell. Do NOT induce vomiting. If skin irritation occurs: Get medical attention. If eye irritation persists: Get medical attention. Take off contaminated clothing. In case of fire: Use foam, dry chemical or carbon dioxide to extinguish.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up.

Disposal: Dispose of contents and/or container according to Federal, State/Provincial and local governmental regulations.

5 % of the mixture consists of ingredient(s) of unknown acute toxicity.

Classification complies with OSHA Hazard Communication Standard (29 CFR 1910.1200) and is consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS Number	Percentage*
Toluene	108-88-3	30 - 60
Methyl ethyl ketone	78-93-3	10 - 30
Carbon black	1333-86-4	5 - 10
Xylenes	1330-20-7	1 - 5

* Exact percentage is a trade secret. Concentration range is provided to assist users in providing appropriate protections.

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If symptoms develop and persist, get medical attention.
Skin contact:	Wash with soap and water. If symptoms develop and persist, get medical attention.
Eye contact:	In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.
Ingestion:	Get immediate medical attention. If vomiting occurs, prevent aspiration by keeping the patient's head below the knees. Do not induce vomiting.
Symptoms:	See Section 11.
Notes to physician:	Aspiration may cause pulmonary edema or aspiration pneumonia.

5. FIRE FIGHTING MEASURES

Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Water should be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat.
Unusual fire or explosion hazards:	None Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition, and flash back.
Hazardous combustion products:	Oxides of carbon. Oxides of aluminum.

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:	Contain spill. Do not allow product to enter sewer or waterways.
Clean-up methods:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up spilled material and place in a closed container for disposal.

7. HANDLING AND STORAGE

Handling: Do not breathe gas/fumes/vapor/spray. Do not get on skin or clothing. Do not taste or swallow. Wash thoroughly after handling. Do not get in eyes.

Storage: For safe storage, store at or below 37 °C (98.6 °F)
Store away from heat, sparks, flames, or other sources of ignition.

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.

Hazardous Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Toluene	20 ppm TWA	200 ppm TWA 300 ppm Ceiling 500 ppm MAX. CONC 10 minutes	None	None
Methyl ethyl ketone	200 ppm TWA 300 ppm STEL	200 ppm (590 mg/m3) PEL	None	None
Carbon black	3 mg/m3 TWA Inhalable fraction.	3.5 mg/m3 PEL	None	None
Xylenes	100 ppm TWA 150 ppm STEL	100 ppm (435 mg/m3) PEL	None	None

Engineering controls: Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection: Use NIOSH approved respirator if there is potential to exceed exposure limit(s). Observe OSHA regulations for respirator use (29 CFR 1910.134).

Eye/face protection: Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

Skin protection: Use impermeable gloves and protective clothing as necessary to prevent skin contact. Use of Butyl or Nitrile Rubber gloves is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Color:	Black
Odor:	Sweet
Odor threshold:	Not available.
pH:	Not available.
Vapor pressure:	Not available.
Boiling point/range:	190 °F (87.8 °C) Approximately
Melting point/range:	Not available.
Specific gravity:	0.85 at 26.7 °C (80.06 °F)
Vapor density:	Not available.
Flash point:	-1 °C (30.2 °F) Tagliabue closed cup
Flammable/Explosive limits - lower:	1.4 % (Toluene)
Flammable/Explosive limits - upper:	7 % (Toluene)
Autoignition temperature:	Not available.
Evaporation rate:	7.7 (Ether = 1)
Evaporation rate:	> 7.7 (Ether = 1)
Solubility in water:	Slight
Partition coefficient (n-octanol/water):	Not available.
VOC content:	83.8 %; 712 g/l EPA Method 24
Viscosity:	Not available.
Decomposition temperature:	Not available.

10. STABILITY AND REACTIVITY

Stability:	Stable
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Hydrogen chloride. Carbonyl chloride.
Incompatible materials:	Strong acids. Strong oxidizing agents.
Reactivity:	Not available.
Conditions to avoid:	Not determined

11. TOXICOLOGICAL INFORMATION

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

Potential Health Effects/Symptoms

Inhalation:	May cause central nervous system effects with nausea, dizziness and headache. Drowsiness.
Skin contact:	Causes skin irritation. May be harmful if absorbed through skin.
Eye contact:	Causes serious eye irritation.
Ingestion:	Aspirated material can enter the lungs and result in pneumonitis. May cause an aspiration hazard if swallowed. Central nervous system depression, including dizziness, drowsiness, fatigue, nausea, headache, unconsciousness.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
Toluene	Oral LD50 (RAT) = 2.6 g/kg Oral LD50 (RAT) = 5,000 mg/kg Dermal LD50 (RABBIT) = 12,124 mg/kg Inhalation LC50 (RAT, 1 h) = 26700 ppm Inhalation LC50 (RAT, 2 h) = 12200 ppm Inhalation LC50 (RAT, 4 h) = 8000 ppm	Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant
Methyl ethyl ketone	Oral LD50 (RAT) = 2,300 - 3,500 mg/kg Oral LD50 (RAT) = 4,500 - 6,800 mg/kg Dermal LD50 (RABBIT) = > 8,000 mg/kg Inhalation LC50 (RAT, 4 h) = 11700 ppm	Irritant, Central nervous system
Carbon black	Oral LD50 (RAT) = > 8,000 mg/kg	Respiratory, Some evidence of carcinogenicity
Xylenes	Oral LD50 (RAT) = 6,670 mg/kg Oral LD50 (RAT) = 3,523 - 8,600 mg/kg Oral LD50 (RAT) = 4,300 mg/kg Dermal LD50 (RABBIT) = > 43 g/kg Inhalation LC50 (RAT, 4 h) = 6,350 mg/l	Cardiac, Central nervous system, Irritant, Kidney, Liver

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Toluene	No	No	No
Methyl ethyl ketone	No	No	No
Carbon black	No	Group 2B	No
Xylenes	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information: Not available.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Follow all local, state, federal and provincial regulations for disposal.

Hazardous waste number: D001: Ignitable.

14. TRANSPORT INFORMATION

The transport information provided in this section only applies to the material/formulation itself, and is not specific to any package/configuration.

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

Proper shipping name: Flammable liquids, n.o.s. (Toluene, Methyl ethyl ketone)
Hazard class or division: 3
Identification number: UN 1993
Packing group: II
DOT Hazardous Substance(s): Toluene, Xylene (mixed)

International Air Transportation (ICAO/IATA)

Proper shipping name: Flammable liquid, n.o.s. (Toluene, Methyl ethyl ketone)
Hazard class or division: 3
Identification number: UN 1993
Packing group: II
Exceptions: May Qualify as Consumer Commodity, (Not more than 500 ml), ID8000

Water Transportation (IMO/IMDG)

Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Toluene, Methyl ethyl ketone)
Hazard class or division: 3
Identification number: UN 1993
Packing group: II
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 minimis

CERCLA/SARA Section 302 EHS: None above reporting de minimis
CERCLA/SARA Section 311/312: Immediate Health, Delayed Health, Fire
CERCLA/SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). Toluene (CAS# 108-88-3). Methyl ethyl ketone (CAS# 78-93-3). Xylenes (CAS# 1330-20-7).

CERCLA Reportable quantity: Toluene (CAS# 108-88-3) 1,000 lbs. (454 kg)
Methyl ethyl ketone (CAS# 78-93-3) 5,000 lbs. (2,270 kg)
Xylenes (CAS# 1330-20-7) 100 lbs. (45.4 kg)

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.

Canada Regulatory Information

CEPA DSL/NDL Status: One or more components are not listed on, and are not exempt from listing on either the Domestic Substances List or the Non-Domestic Substances List.

16. OTHER INFORMATION

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

Prepared by: Catherine Bimler, Regulatory Affairs Specialist

Issue date: 08/25/2014

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