

ITEM: 5E205 - ADHESIVE

P/N REQ: 1005595736

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: A5791

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - A5791

Associated Grainger Item: 5E205 - ADHESIVE

LOCTITE(R*)

MATERIAL SAFETY DATA SHEET

HENKEL TECHNOLOGIES

REVISION DATE: 10/27/2003

ISSUE DATE: 10/27/2003

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 404 QUICK SET(TM) INSTANT ADHESIVE

ITEM NUMBER: 46551

PRODUCT TYPE: CYANOACRYLATE

REGION: UNITED STATES

COMPANY ADDRESS:
HENKEL LOCTITE CORPORATION
1001 TROUT BROOK CROSSING
ROCKY HILL, CONNECTICUT 06067CONTACT INFORMATION:
TELEPHONE: 860.571.5100
EMERGENCY TELEPHONE: 860.571.5100
INTERNET: WWW.LOCTITE.COM

2. COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS COMPONENTS	%	ACGIH TLV	OSHA PEL	OTHER
ETHYL CYANOACRYLATE	60-100	0.2 PPM TWA	NONE	NONE
7085-85-0				

3. HAZARDS IDENTIFICATION

EMERG. OVERVIEW:

PHYSICAL STATE: LIQUID

COLOR: CLEAR COLORLESS

ODOR: SHARP, IRRITATING

HMIS:
HEALTH: 2
FLAMMABILITY: 2
PHYSICAL HAZARD: 1
PERSONAL PROTECTION: SEE SECTION 8WARNING:
BONDS SKIN IN SECONDS.
MAY CAUSE EYE AND RESPIRATORY 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 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.

SEE SECTION 11 FOR ADDITIONAL TOXICOLOGICAL INFORMATION.

4. FIRST AID MEASURES

INHALATION:
REFRESH 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 TODEBOND 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:
65 DEG. C (150 DEG. F) TO 93.4 DEG. C (200 DEG. F) TAGLIABUE CLOSED CUP

AUTOIGNITION TEMPERATURE: 405 DEG. C (905 DEG. F)

FLAMMABLE/EXPLOSIVE LIMITS-LOWER %: NOT DETERMINED

FLAMMABLE/EXPLOSIVE LIMITS-UPPER %: NOT DETERMINED

EXTINGUISHING MEDIA: DRY POWDER. FOAM. CARBON DIOXIDE.

SPECIAL FIRE FIGHTING 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

ENVIRONMENTAL PRECAUTIONS:
VENTILATE AREA. PREVENT PRODUCT FROM ENTERING THE DRAINS.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 LOCTITE CUSTOMER
SERVICE AT (800) 243-4874.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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).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: LIQUID

COLOR: CLEAR COLORLESS

ODOR: SHARP, IRRITATING

VAPOR PRESSURE: LESS THAN 0.2 MM HG

PH: NOT APPLICABLE

BOILING POINT/RANGE: GREATER THAN 149 DEG. C (300 DEG. F)

MELTING POINT/RANGE: NOT DETERMINED

SPECIFIC GRAVITY: 1.09 AT 23.9 DEG. C (75 DEG. F)

VAPOR DENSITY: APPROXIMATELY 3

EVAPORATION RATE: NOT AVAILABLE

SOLUBILITY IN WATER: POLYMERIZES IN PRESENCE OF WATER

PARTITION COEFFICIENT (N-OCTANOL/WATER): NOT APPLICABLE

WOC CONTENT:
93.0%; 1013.7 GRAMS/LITER (EPA METHOD 24) LESS THAN 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

INCOMPATIBILITY: WATER, AMINES, ALKALIS AND ALCOHOLS.

CONDITIONS TO AVOID: SPONTANEOUS POLYMERIZATION

11. TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY DATA:
ACUTE ORAL LD50 >5000 MG/KG (RAT) (ESTIMATED).
ACUTE DERMAL LD50 >2000 MG/KG (RABBIT) (ESTIMATED).

CARCINOGEN STATUS:
HAZARDOUS COMPONENTS: ETHYL CYANOACRYLATE
NTP CARCINOGEN: NO
IARC CARCINOGEN: NO
OSHA CARCINOGEN: NO

LITERATURE REFERENCED TARGET ORGAN & OTHER HEALTH EFFECTS:
HAZARDOUS COMPONENTS: ETHYL CYANOACRYLATE
HEALTH EFFECTS/TARGET ORGANS: ALLERGEN, IRRITANT, RESPIRATORY

12. ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: NOT KNOWN

13. DISPOSAL CONSIDERATIONS

INFORMATION PROVIDED IS FOR UNUSED PRODUCT ONLY.

RECOMMENDED METHOD OF DISPOSAL:
DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

EPA HAZARDOUS WASTE NUMBER: NOT A RCRA HAZARDOUS WASTE.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION GROUND (49 CFR):
PROPER SHIPPING NAME: COMBUSTIBLE LIQUIDS, N.O.S. (CYANOACRYLATE ESTER)
HAZARD CLASS OR DIVISION: 3
IDENTIFICATION NUMBER: NA 1993
PACKING GROUP: NONE
EXCEPTIONS: (NOT MORE THAN 450 LITERS) UNRESTRICTED
MARINE POLLUTANT: NONE

INTERNATIONAL AIR TRANSPORTATION (ICAO/IATA):
PROPER SHIPPING NAME:
AVIATION REGULATED LIQUIDS, N.O.S. (CYANOACRYLATE ESTER)
HAZARD CLASS OR DIVISION: 9
IDENTIFICATION NUMBER: UN 3334
PACKING GROUP: III
EXCEPTIONS: (NOT MORE THAN 500 ML) UNRESTRICTED

WATER TRANSPORTATION (IMO/IMDG):
PROPER SHIPPING NAME: UNRESTRICTED
HAZARD CLASS OR DIVISION: NONE
IDENTIFICATION NUMBER: NONE
PACKING GROUP: NONE
MARINE POLLUTANT: 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 5 (A) (2) SNUR: NONE.

TSCA 12 (B) EXPORT NOTIFICATION: NONE.

CERCLA/SARA SECTION 302 EHS: NONE ABOVE REPORTING DE MINIMUS.

CERCLA/SARA SECTION 311/312:
IMMEDIATE HEALTH HAZARD, DELAYED HEALTH HAZARD, FIRE, REACTIVE

CERCLA/SARA 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). NONE ABOVE REPORTING DE MINIMUS.

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 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: NEW MATERIAL SAFETY DATA SHEET FORMAT.

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DISCLAIMER:

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ITEM NUMBER: 46551

PRODUCT NAME: 404 QUICK SET(TM) INSTANT ADHESIVE