



Revision Number: 003.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name: 3705 UV 1L EN/CH/JP
Product type: Ultraviolet adhesive

IDH number: 794106
Item number: 40735
Region: United States

Company address:
Henkel Electronic Materials LLC
14000 Jamboree Road
Irvine, CA 92606

Contact information:
Telephone: 1.888.9.HENKEL (1.888.943.6535)
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 or paste
Color: Beige
Odor: mild
HEALTH: *2
FLAMMABILITY: 2
PHYSICAL HAZARD: 1
Personal Protection: See MSDS Section 8

WARNING: COMBUSTIBLE LIQUID AND VAPOR.
HARMFUL IF INHALED.
DO NOT SPRAY. DO NOT HEAT.
CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
MAY CAUSE ALLERGIC SKIN REACTION.
MAY BE HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN.

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

Potential Health Effects

Inhalation: Modified acrylamide is harmful if inhaled. Causes respiratory tract irritation. Vapors and mists will irritate nose and throat and possibly eyes. DO NOT heat or spray as this increases the inhalation hazard.
Skin contact: Modified acrylamide may be absorbed through skin in harmful amounts. Toxic. Moderate skin irritation. May cause allergic skin reaction. Symptoms may include redness, burning, drying, cracking and skin burns. Pain and discomfort. Itching.
Eye contact: Vapors may irritate eyes. Contact with eyes will cause irritation. Pain and discomfort. Excess tearing.
Ingestion: May be harmful if swallowed. Symptoms can include sore throat, abdominal pain, nausea, vomiting and diarrhea.

Existing conditions aggravated by exposure: Dermatitis. Eczema. Asthma. Pre-existing skin or lung allergies may increase the chance of developing exaggerated allergic symptoms from exposure to this product. Eye 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	%
Urethane Polymer	Proprietary	30 - 60
Isobornyl acrylate	5888-33-5	30 - 60
Modified acrylamide	2680-03-7	10 - 30
Treated fumed silica	67762-90-7	5 - 10
Photoinitiator	Proprietary	1 - 5
Substituted silane	Proprietary	1 - 5

4. FIRST AID MEASURES

Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop and persist, get medical attention.
Skin contact:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Ingestion:	DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Give a conscious person several glasses of water. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash point:	84 °C (183.2 °F) Closed cup
Autoignition temperature:	Not available
Flammable/Explosive limits - lower:	Not available
Flammable/Explosive limits - upper:	Not available
Extinguishing media:	Water spray (fog), foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.
Unusual fire or explosion hazards:	Uncontrolled polymerization may occur at high temperatures resulting in explosions or rupture of storage containers.
Hazardous combustion products:	Oxides of carbon. Oxides of nitrogen. Oxides of silicon. Formaldehyde. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

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:	Remove all sources of ignition. Ensure adequate ventilation. 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. Store in a closed container until ready for disposal. Refer to Section 8 "Exposure Controls / Personal Protection" prior to clean up.

7. HANDLING AND STORAGE

- Handling:** Use only with adequate ventilation. Keep away from heat, spark and flame. Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling. Do not taste or swallow. Keep container closed. Refer to Section 8.
- Storage:** For safe storage, store between 10 °C (50°F) and 32 °C (89.6 °F) 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, 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.

Hazardous components	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
Urethane Polymer	None	None	None	None
Isobornyl acrylate	None	None	None	None
Modified acrylamide	None	None	None	0.1 mg/m ³ TWA (Skin) 0.025 ppm TWA (Skin)
Treated fumed silica	10 mg/m ³ TWA Inhalable dust. 3 mg/m ³ TWA Respirable fraction.	15 mg/m ³ TWA Total dust. 5 mg/m ³ TWA Respirable fraction.	None	None
Photoinitiator	None	None	None	None
Substituted silane	None	None	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:** If personal exposure cannot be controlled below applicable limits by ventilation, wear a properly fitted organic vapor/particulate respirator approved by NIOSH. If this material is handled at elevated temperature or under mist forming conditions, a NIOSH approved respirator must be used.
- 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. Safety showers and eye wash stations should be available.
- Skin protection:** Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact. Neoprene gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state:** Liquid or paste
Color: Beige
Odor: mild
Odor threshold: Not available
pH: Not applicable
Vapor pressure: < 5.0 mm hg (20 °C (68°F))
Boiling point/range: Not available
Melting point/ range: Not available
Specific gravity: 1.12
Vapor density: > 1
Flash point: 84 °C (183.2 °F) Closed cup
Flammable/Explosive limits - lower: Not available
Flammable/Explosive limits - upper: Not available
Autoignition temperature: Not available
Evaporation rate: Not available

Solubility in water: Slight
Partition coefficient (n-octanol/water): Not available
VOC content: 0 %; 0 g/l (calculated)

10. STABILITY AND REACTIVITY

Stability: Unstable.

Hazardous reactions: May occur.

Hazardous decomposition products: Oxides of carbon. Oxides of nitrogen. Oxides of silicon. Formaldehyde.

Incompatible materials: Strong oxidizing agents. Strong acids and strong bases. Moisture. Peroxides. Free radical initiators. Reducing agents.

Conditions to avoid: Store away from incompatible materials. Heat, flames, sparks and other sources of ignition. Exposure to moisture. Exposure to sunlight.

11. TOXICOLOGICAL INFORMATION

Product toxicity data: Modified acrylamide: LD50 (oral, rat) 316 mg/kg LD50 (dermal, rabbit) 518 mg/kg LC50 (vapor, 1hour, rat) greater than 776 ppm.

Hazardous components	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Urethane Polymer	No	No	No
Isobornyl acrylate	No	No	No
Modified acrylamide	No	No	No
Treated fumed silica	No	No	No
Photoinitiator	No	No	No
Substituted silane	No	No	No

Hazardous components	Health Effects/Target Organs
Urethane Polymer	No Records
Isobornyl acrylate	Irritant, Allergen
Modified acrylamide	Irritant, Eyes, Mutagen, Kidney, Less weight gain and food intake.
Treated fumed silica	Irritant
Photoinitiator	No Target Organs
Substituted silane	Irritant, Allergen

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: Not a RCRA hazardous waste.

14. TRANSPORT INFORMATION

The shipping classification in this section is the substance classification. The actual shipping classification may be different as exceptions may apply based upon size of package and mode of shipment. Please 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. (N,N-Dimethylacrylamide)
Hazard class or division: Combustible Liquid
Identification number: NA 1993
Packing group: III

International Air Transportation (ICAO/IATA)

Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Isobornyl acrylate)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III

Water Transportation (IMO/IMDG)

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Isobornyl acrylate)
Hazard class or division: 9
Identification number: UN 3082
Packing group: III
Marine pollutant: Isobornyl acrylate

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: Fire, Immediate Health, Delayed Health
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.1.B, D.2.B

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: This Material Safety Data Sheet contains changes from the previous version in Section(s): 2,9,14

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