

Revision Number: 007.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:

Product type/use: Liquid Flux Restriction of Use: None ident Company address: Henkel Corporation One Henkel Way Rocky Hill, Connecticut 06067

LOCTITE X33-04 known as X3304-MC-N MB2156 Liquid Flux None identified

IDH number:	479131
Item number:	M00385
Region:	United States
Contact information:	
Telephone: +1 (860) 571	
MEDICAL EMERGENCY	Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGE	NCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3887
Internet: www.henkelna.d	com

This product contains one or more components regulated under a Significant New Use Rule (SNUR) by the US EPA. See Section 15 for more information.

2. HAZARDS IDENTIFICATION

	EMERGENCY OVERVIEW	
DANGER:	HIGHLY FLAMMABLE LIQUID AND VAPOUR.	
	CAUSES SERIOUS EYE IRRITATION.	
	MAY CAUSE DROWSINESS OR DIZZINESS.	

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

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 non-sparking tools. Take action to prevent static discharges. Avoid breathing vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eve protection, and face protection.
_	
Response:	If on skin (or hair): Take off immediately all contaminated clothing. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. 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.

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*
2-Propanol	67-63-0	80 - 100
Bis(2-butoxyethyl)ether	112-73-2	5 - 10
Hydroxy-2-methylpentan-4-on-2	123-42-2	5 - 10
adipic acid	124-04-9	1 - 5

* Exact percentages may vary or are trade secret. Concentration range is provided to assist users in providing appropriate protections.

4.	FIRST AID MEASURES
Inhalation:	Move 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:	Remove contaminated clothing and footwear. Immediately flush skin with plenty of water (using soap, if available). If symptoms develop and persist, g medical attention. Wash clothing before reuse.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 1 minutes. If symptoms develop and persist, get medical attention.
Ingestion:	Do not induce vomiting. Get medical attention.
Symptoms:	See Section 11.
5. F	RE FIGHTING MEASURES
Extinguishing media:	Foam, dry chemical or carbon dioxide.
Special firefighting procedures:	Wear self-contained breathing apparatus and full protective clothing, such a turn-out gear.
Unusual fire or explosion hazards:	Vapors may form explosive mixtures with air. Closed containers may ruptur (due to build up of pressure) when exposed to extreme heat.
Hazardous combustion products:	Oxides of carbon. Thermal decomposition can lead to release of irritating gases and vapors.

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:	Evacuate personnel to safe areas. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling:	Use only with adequate ventilation. Keep away from heat, spark and flame. Make sure containers are properly grounded before use or transfer of material. Empty containers retain product residue, so obey hazard warnings and handle empty containers as if they were full.
Storage:	Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use. Ground and bond metal containers for liquid transfer to avoid static sparks.

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 Component(s)	ACGIH TLV	OSHA PEL	AIHA WEEL	OTHER
2-Propanol	200 ppm TWA 400 ppm STEL	400 ppm (980 mg/m3) PEL	None	None
Bis(2-butoxyethyl)ether	None	None	None	None
Hydroxy-2-methylpentan-4-on-2	50 ppm TWA	50 ppm (240 mg/m3) PEL	None	None
adipic acid	5 mg/m3 TWA	None	None	None

Engineering controls:

Use only with adequate ventilation. Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection:

Eye/face protection:

limit(s). Safety goggles or safety glasses with side shields. Full face protection should be used if the potential for splashing or spraying of product exists.

Use NIOSH approved respirator if there is potential to exceed exposure

Skin protection:

Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: Odor: Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity: Decomposition temperature:	Physical state:
Odor threshold: pH: Vapor pressure: Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Color:
pH: Vapor pressure: Boiling point/range: Melting point/range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Odor:
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Boiling point/range: Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	pH:
Melting point/ range: Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Vapor pressure:
Specific gravity: Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Boiling point/range:
Vapor density: Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Melting point/ range:
Flash point: Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Specific gravity:
Flammable/Explosive limits - lower: Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Vapor density:
Flammable/Explosive limits - upper: Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Flash point:
Autoignition temperature: Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Flammable/Explosive limits - lower:
Flammability: Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Flammable/Explosive limits - upper:
Evaporation rate: Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Autoignition temperature:
Solubility in water: Partition coefficient (n-octanol/water): VOC content: Viscosity:	Flammability:
Partition coefficient (n-octanol/water): VOC content: Viscosity:	Evaporation rate:
VOC content: Viscosity:	Solubility in water:
Viscosity:	Partition coefficient (n-octanol/water):
	VOC content:
Decomposition temperature:	Viscosity:
	Decomposition temperature:

Liquid Colorless Alcoholic Not available. Not available. 6.6 kPa (25 °C (77°F)) 82 °C (179.6 °F) Not available. 0.807 at 20 °C (68°F) Heavier than air. 11 °C (51.8 °F) 2 % 12 % 398 °C (748.4 °F) Not applicable Not available. Soluble Not available. 94 %; 750 g/l Not available. Not available.

	IU. STABILITT AND REACTIVITT
Stability:	Stable under recommended storage conditions. Electrostatic charge may build-up during handling. Grounding of equipment is recommended.
Hazardous reactions:	Will not occur.
Hazardous decomposition products:	Thermal decomposition can lead to release of irritating gases and vapors.
Incompatible materials:	Incompatible with oxidising agents. Dissolves aluminium and zinc slowly with formation of hydrogen.
Reactivity:	Not available.
Conditions to avoid:	Keep away from open flames, hot surfaces and sources of ignition.

10 STABILITY AND REACTIVITY

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure:

Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation:	
Skin contact:	

Eye contact:

Ingestion:

Inhalation of processing fumes may be harmful. Vapor overexposure may cause drowsiness. Dizziness. May cause skin irritation. Causes serious eye irritation. Not expected under normal conditions of use.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects
2-Propanol	Oral LD50 (Rat) = 5,045 mg/kg Oral LD50 (Mouse) = 3,600 mg/kg Oral LD50 (Rabbit) = 6,410 mg/kg Oral LD50 (Rat) = 4.7 g/kg Oral LD50 (Mouse) = 4.5 g/kg Oral LD50 (Rabbit) = 8.0 g/kg Oral LD50 (Rabbit) = 5.03 g/kg Dermal LD50 (Rabbit) = 12,800 mg/kg	Allergen, Central nervous system, Irritant
Bis(2-butoxyethyl)ether	None	Irritant, Reproductive
Hydroxy-2-methylpentan-4-on-2	Oral LD50 (Rat) = 4.0 g/kg	Blood, Central nervous system, Irritant, Kidney, Liver
adipic acid	Oral LD50 (Mouse) = 1,900 mg/kg Oral LD50 (Rabbit) = > 11,000 mg/kg Oral LD50 (Rat) = > 11,000 mg/kg	Irritant, Kidney, Liver, Nervous System, Respiratory

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
2-Propanol	No	No	No
Bis(2-butoxyethyl)ether	No	No	No
Hydroxy-2-methylpentan-4-on-2	No	No	No
adipic acid	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.

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: Isopropanol solution

Identification number: Packing group:	UN 1219 II			
International Air Transportation (ICAO/IATA)				

Proper shipping name: Isopropanol solution Hazard class or division: 3 Identification number: UN 1219 Packing group: Ш Water Transportation (IMO/IMDG) Proper shipping name: **ISOPROPANOL** solution Hazard class or division: 3 Identification number: UN 1219 Packing group: Ш

15. REGULATORY INFORMATION

United States Regulatory Information

	TSCA 8 (b) Inventory Status:	All components are listed as active or are exempt from listing on the Toxic Substances Control Act (TSCA) inventory.
	TSCA 5(a) SNUR:	This product contains the following component(s) subject to a Significant New Use Rule (SNUR) by the US EPA:
		Bis(2-butoxyethyl)ether (CAS # 112-73-2). The SNUR is codified at Section number: 40 CFR 721.10229
	TSCA 12 (b) Export Notification:	Bis(2-butoxyethyl)ether (CAS# 112-73-2).
	CERCLA/SARA Section 302 EHS: CERCLA/SARA Section 311/312: CERCLA/SARA Section 313:	None above reporting de minimis. Fire, Immediate Health, Delayed Health 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
	CERCLA Reportable quantity:	CFR 372). Bis(2-butoxyethyl)ether (CAS# 112-73-2). 2-Propanol (CAS# 67-63-0) 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.
Cana	ada Regulatory Information	
	CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

16. OTHER INFORMATION

This safety data sheet contains changes from the previous version in sections: 1,2,3,4,5,7,8,11,13,14,15

Prepared by:	Product Safety and Regulatory Affairs
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Issue date: 08/04/2022

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