

Revision Number: 006.5 Issue date: 10/27/2017

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LOCTITE S 563R known as DORUS S IDH number: 748017

563R

Product type: Adhesive

Restriction of Use: None identified

Company address: Henkel Corporation

One Henkel Way

Rocky Hill, Connecticut 06067

Region: United States

Contact information: Telephone: +1 (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.

MAY CAUSE AN ALLERGIC SKIN REACTION.

CAUSES SERIOUS EYE IRRITATION.

MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING

DIFFICULTIES IF INHALED.

MAY CAUSE DROWSINESS OR DIZZINESS.

SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD. MAY CAUSE DAMAGE TO ORGANS THROUGH PROLONGED OR

REPEATED EXPOSURE.

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





Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been

read and understood. 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. Do not breathe vapors, mist, or spray. Wash affected area thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, clothing, eye and face protection. In case of inadequate ventilation wear respiratory

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 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 exposed or concerned: Get medical attention. Do NOT induce vomiting. If skin irritation or rash 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.

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*
Acetone	67-64-1	30 - 40
n-Hexane	110-54-3	20 - 30
Heptane, branched, cyclic and linear	426260-76-6	10 - 20
Toluene	108-88-3	5 - 10
Distillates (petroleum), hydrotreated light paraffinic, <3% DMSO	64742-55-8	1 - 5
Phenolic resin	Unknown	1 - 5
Magnesium oxide	1309-48-4	1 - 5
Rosin	8050-09-7	0.1 - 1
Zinc oxide	1314-13-2	0.1 - 1

^{*} 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 not breathing, give artificial respiration. Get immediate

medical attention.

Skin contact: Immediately wash skin thoroughly with soap and water. Remove contaminated

clothing and footwear. Get immediate medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15

minutes. Get immediate medical attention.

Ingestion: DO NOT induce vomiting unless directed to do so by medical personnel.

Never give anything by mouth to an unconscious person. Get immediate

medical attention.

Symptoms: See Section 11.

IDH number: 748017

5. FIRE FIGHTING MEASURES

Extinguishing media: Foam, dry chemical or carbon dioxide.

Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as

turn-out gear.

Unusual fire or explosion hazards: Vapors are heavier than air and may travel along the ground or be moved by

ventilation and subsequently ignited by heat, pilot lights or other ignition sources at locations distant from the material handling point. Overexposure to decomposition products may cause a health hazard. Symptoms may not be

readily apparent. Obtain medical attention.

Hazardous combustion products: Thermal decomposition can lead to release of irritating gases and vapors.

Smoke. Oxides of carbon.

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: Isolate area. Keep unnecessary personnel away. Prevent further leakage or

spillage if safe to do so. Prevent contamination of soil and water.

Clean-up methods: Remove all sources of ignition. Use non-sparking tools for clean-up. Wear

suitable protective clothing, gloves and eye/face protection. Wear suitable respiratory protection. Avoid skin contact and inhalation of vapors during disposal of spills. Confine in small area, use absorbent to clean up. Place in

container for disposal with accordance with federal, state and local

regulations.

7. HANDLING AND STORAGE

Handling: Do not handle or store near an open flame, heat or other sources of ignition.

Avoid breathing vapors or mists of this product. Wear suitable protective clothing, safety glasses and gloves. Avoid skin and eye contact. Use proper

bonding and/or grounding procedures. Keep container closed.

Storage: Store in a cool, dry, well-ventilated area.

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
Acetone	250 ppm TWA 500 ppm STEL	1,000 ppm (2,400 mg/m3) PEL	None	None
n-Hexane	50 ppm TWA (SKIN)	500 ppm (1,800 mg/m3) PEL	None	None
Heptane, branched, cyclic and linear	400 ppm TWA 500 ppm STEL	500 ppm (2,000 mg/m3) PEL	None	None
Toluene	20 ppm TWA	200 ppm TWA 300 ppm Ceiling 500 ppm MAX. CONC 10 minutes	None	None
Distillates (petroleum), hydrotreated light paraffinic, <3% DMSO	5 mg/m3 TWA Inhalable fraction.	5 mg/m3 PEL Mist.	None	None
Phenolic resin	None	None	None	None
Magnesium oxide	10 mg/m3 TWA Inhalable fraction.	15 mg/m3 PEL Total particulate. 50 MPPCF TWA Total dust. 5 mg/m3 TWA Respirable fraction. 15 mg/m3 TWA Total dust. 15 MPPCF TWA Respirable fraction.	None	None
Rosin	Exposure by all routes should be carefully controlled to levels as low as possible. Included in the regulation but with no data values. See regulation for further details (Respiratory sensitization) (Dermal sensitization)	None	None	None
Zinc oxide	2 mg/m3 TWA Respirable fraction. 10 mg/m3 STEL Respirable fraction.	5 mg/m3 PEL Fume. 5 mg/m3 PEL Respirable fraction. 15 mg/m3 PEL Total dust.	None	None

Engineering controls: Work should be done in an adequately ventilated area (i.e., ventilation

sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general

ventilation is not sufficient to control airborne contamination.

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. Wear face shield as

necessary when spraying.

Skin protection:Use impermeable gloves and protective clothing as necessary to prevent skin

contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:LiquidColor:RedOdor:SolventOdor threshold:Not available.pH:Not applicableVapor pressure:Not determined

Boiling point/range: 54 - 112 °C (129.2 - 233.6 °F)

Melting point/ range: Not determined

Specific gravity: 0.79

Vapor density: Heavier than air.

Flash point: < -26.10 °C (< -14.98 °F) calculated

Flammable/Explosive limits - lower:

Flammable/Explosive limits - upper:

Autoignition temperature:

Plammability:

2.2 % (value for solvent)

13 % (value for solvent)

Not determined

Not applicable

Evaporation rate: Slower than diethyl ether.

Solubility in water:

Partition coefficient (n-octanol/water):

VOC content:

Viscosity:

Decomposition temperature:

Not soluble

Not determined

81.00 %

100 - 150 cp

Not available.

10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.

Hazardous reactions: Will not occur.

Hazardous decomposition

products:

Burning, including when heated by welding or cutting, will produce smoke, carbon monoxide

and carbon dioxide.

Incompatible materials: Oxidizing agents. Strong acids and strong bases.

Reactivity: Not available.

Conditions to avoid: Freezing conditions. Heat, flames, sparks and other sources of ignition.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes

Potential Health Effects/Symptoms

Inhalation: May cause irritation to nose and throat. Inhalation of vapors may cause moderate to severe

respiratory tract irritation. Central nervous system depression, including dizziness, drowsiness, fatigue, nausea, headache, unconsciousness. May cause allergic respiratory reaction. Chronic exposure to toluene may have effects on the central nervous system and these effects may progress to be irreversible. Intentional misuse of toluene has resulted in reproductive effects

including physical and developmental abnormalities.

Skin contact: Causes skin irritation. May cause an allergic skin reaction. May cause allergic skin reaction in

susceptible individuals. This material is a primary skin irritant. May cause irritation due to

defatting of the skin.

Eye contact: Causes serious eye irritation. This product may be severely irritating to the eyes. May cause

corneal injury.

Ingestion: Harmful if swallowed. Ingestion can cause gastrointestinal irritation, nausea, vomiting and

diarrhea. Aspirated material can enter the lungs and result in pneumonitis.

Hazardous Component(s)	LD50s and LC50s	Immediate and Delayed Health Effects	
Acetone	Oral LD50 (Mouse) = 5.2 g/kg Oral LD50 (Mouse) = 3,000 mg/kg Oral LD50 (Rabbit) = 5,340 mg/kg Oral LD50 (Rat) = 5,800 mg/kg Oral LD50 (Rat) = 9,800 mg/kg Dermal LD50 (Rabbit) = 20,000 mg/kg Inhalation LC50 (Rat, 4 h) = 76 mg/l	Central nervous system, Irritant	
n-Hexane	Oral LD50 (Rat) = 28,710 mg/kg Dermal LD50 (Rabbit) = > 2,000 mg/kg Inhalation LC50 (Rat, 4 h) = 73860 ppm	Developmental, Irritant, Lung, Nervous System, Reproductive	
Heptane, branched, cyclic and linear	None	Irritant, Central nervous system	
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, 4 h) = 8000 ppm	Behavioral, Cardiac, Central nervous system, Developmental, Ear, Irritant	
Distillates (petroleum), hydrotreated light paraffinic, <3% DMSO	None	Irritant, Some evidence of carcinogenicity	
Phenolic resin	None	No Data	
Magnesium oxide	None	Blood, Central nervous system, Immune system, Irritant	
Rosin	None	Allergen, Irritant, Respiratory	
Zinc oxide	Oral LD50 (Mouse) = 7,950 mg/kg Oral LD50 (Rat) = > 5 g/kg Inhalation LC50 (Mouse, 4 h) = > 5.7 mg/l	Blood, Gastrointestinal, Immune system, Irritant, Kidney, Metabolic, Nervous System, Pancreas, Respiratory, Skin	

Hazardous Component(s)	NTP Carcinogen	IARC Carcinogen	OSHA Carcinogen (Specifically Regulated)
Acetone	No	No	No
n-Hexane	No	No	No
Heptane, branched, cyclic and linear	No	No	No
Toluene	No	No	No
Distillates (petroleum), hydrotreated light paraffinic, <3% DMSO	No	No	No
Phenolic resin	No	No	No
Magnesium oxide	No	No	No
Rosin	No	No	No
Zinc oxide	No	No	No

12. ECOLOGICAL INFORMATION

Ecological information:

Do not empty into drains, soil or bodies of water.

13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Legal disposition of wastes is the responsibility of the owner/generator of the

waste. Applicable federal, state and/or local regulations must be followed during treatment, storage, or disposal of waste containing this product. Empty

containers must be handled with care due to product residue.

Hazardous waste number: D001: Ignitable. This product may contain traces of: Benzene. Therefore, it

may be classified as hazardous waste under EPA RCRA (40 CFR 261.24), with waste number(s): D018. Benzene. However this product is only classifiable as hazardous waste if it exhibits the characteristics of toxicity as shown by the toxicity characteristic leaching procedure (TCLP). Under RCRA, it is the responsibility of the end user of this product to determine whether it

meets this criteria at the time of 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:
Hazard class or division:
Identification number:

Packing group:

Adhesives

UN 1133

DOT Hazardous Substance(s): Toluene, Acetone

International Air Transportation (ICAO/IATA)

Proper shipping name: Adhesives
Hazard class or division: 3
Identification number: UN 1133
Packing group: II

Water Transportation (IMO/IMDG)

Proper shipping name: ADHESIVES (n-Heptane)

Hazard class or division:

Identification number:

Packing group:

Marine pollutant:

3

UN 1133

II

n-Heptane

15. REGULATORY INFORMATION

United States Regulatory Information

CERCLA Reportable quantity:

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

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). n-Hexane (CAS# 110-54-3). Toluene (CAS# 108-88-3).

Acetone (CAS# 67-64-1) 5,000 lbs. (2,270 kg) Toluene (CAS# 108-88-3) 1,000 lbs. (454 kg)

n-Hexane (CAS# 110-54-3) 5,000 lbs. (2,270 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/NDSL 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: 2

Prepared by: Product Safety and Regulatory Affairs

Issue date: 10/27/2017

DISCLAIMER: The data contained herein are furnished for information only and are believed to be reliable. However, Henkel Corporation and its affiliates ("Henkel") does not assume responsibility for any results obtained by persons over whose methods Henkel has no control. It is the user's responsibility to determine the suitability of Henkel's products or any production methods mentioned herein for a particular purpose, and to adopt such precautions as may be advisable for the protection of property and persons against any hazards that may be involved in the handling and use of any Henkel's products. In light of the foregoing, Henkel specifically disclaims all warranties, express or implied, including warranties of merchantability and fitness for a particular purpose, arising from sale or use of Henkel's products. Henkel further disclaims any liability for consequential or incidental damages of any kind, including lost profits.

IDH number: 748017 Product name: LOCTITE S 563R known as DORUS S 563R