LOCTITE CORPORATION 10/20/98

ROCKY HILL, CONNECTICUT 06067 EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET Page 01 of 06

Naval Jelly(R) Rust Neutralizer 81847

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Item No.: 81847
Part No.: RTS-16

Product Type: Aerosol Coating

2. COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients	CAS No.	%
ACETONE	67-64-1	40-45
DIMETHYL ETHER	115-10-6	40-45
2-BUTOXYETHANOL*	111-76-2	5-10
Organic acid	Proprietary	1-3
Vinyl terpolymer	27360-07-2	1-3
Water	7732-18-5	1-3

^{*} This component is listed as a SARA Section 313 Toxic Chemical.

Ingredients which have exposure limits

Exposure Limits Ingredients	(TWA)	ACGIH (TLV)	OSHA (PEL)	OTHER
ACETONE		500 ppm TWA 1188 mg/m3	750 ppm TWA 1800 mg/m3	None
2-BUTOXYETHANOL		5 ·	50 ppm TWA skin 120mg/m3 skin	None
Exposure Limits Ingredients	(STEL)	ACGIH (TLV)	OSHA (PEL)	
ACETONE		750 ppm 1782 mg/m3	1000 ppm 2400 mg/m3	

3. HAZARDS IDENTIFICATION

Toxicity: Irritation of eyes, skin and respiratory system.

May cause nervous system depression. Extreme overexposure may result in unconsciousness and

possibly death.

Reports have associated repeated and prolonged overexposure to solvents with permanent brain and

nervous system damage.

Prolonged overexposure to solvent ingredients in Section 2 may cause adverse effects to the liver,

urinary, and blood forming systems.

LOCTITE CORPORATION 10/20/98

ROCKY HILL, CONNECTICUT 06067 EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET Page 02 of 06

Item No.: 81847

3. HAZARDS IDENTIFICATION

(continued)

Primary Routes of Entry: Exposure may be by inhalation and/or skin or eye

contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective

equipment.

Signs and Symptoms

of Exposure: Headache, dizziness, nausea, and loss of

coordination are indications of excessive exposure to vapors or spray mists. Redness and itching or burning sensation may indicate eye or excessive

skin exposure.

Existing Conditions

Aggravated by Exposure: None generally recognized.

	Literature Referenced	Carcinogen NTP IARC OSHA		
Ingredients	Target Organ and Other Health Effects			OSHA
ACETONE	AC4 BLO CNS IRR	NO	NO	NO
DIMETHYL ETHER	CNS IRR	NO	NO	NO
2-BUTOXYETHANOL	BLO CNS IRR	NO	NO	NO
Organic acid	COR IRR KID LIV	NO	N/A	NO
Vinyl terpolymer	No Data	NO	NO	NO
Water	No Data	NO	NO	NO

Abbreviations

N/A Not Applicable AC4 ACGIH-Unclassifiable as human carc.

BLO Blood CNS Central nervous system

COR Corrosive IRR Irritant
KID Kidney LIV Liver

4. FIRST AID MEASURES

Ingestion: Never give anything by mouth to an unconscious

person. Do not induce vomiting. Give several glasses of water. Seek medical attention.

Inhalation: If affected, remove from exposure. Restore

breathing. Keep warm and quiet.

Skin Contact: Wash affected area thoroughly with soap and water.

Remove contaminated clothing and launder before

reuse.

Eye Contact: Flush eyes with large amounts of water for 15

minutes. Get medical attention.

LOCTITE CORPORATION 10/20/98

ROCKY HILL, CONNECTICUT 06067 EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET Page 03 of 06

Item No.: 81847

5. FIRE FIGHTING MEASURES

Flash Point: Less than 0°F (Propellant) Method: Tag closed cup

Recommended

Extinguishing Agents: Carbon dioxide, foam, dry chemical

Special Firefighting Procedures:

Full protective equipment including self-contained breathing apparatus should be used. Water spray may be ineffective. If water is used, fog nozzles are preferable. Water may be used to cool containers to prevent pressure build up and possible autoignition or explosion when wxposed to extreme heat.

Hazardous Products formed by Fire or Thermal Decomp Unusual Fire or

by Fire or Thermal Decomp Irritating organic vapors; oxides of carbon.

Explosion Hazards:

Closed containers may explode (due to build-up of pressure) when exposed to extreme heat. Isolate from heat, electrical equipment, sparks, and open flame. Closed containers may expode when exposed to extreme heat. Application to hot requires special precautions. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent.

Explosive Limits:

(% by volume in air)Lower 1.1% (% by volume in air)Upper 57.0%

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken in case of spill or leak:

Remove all sources of ignition. Maintain good ventilation. Soak up with an inert absorbent. Store in a closed container until disposal.

7. HANDLING AND STORAGE

Safe Storage:

(Contact Loctite Customer Handling:

Keep away from heat, sparks, and open flame. Service 1-800-243-4874 for shelf life information) Keep away from heat, sparks or open flame. Vapors will accumulate readily and may ignite explosively Keep away from eyes. Avoid breathing of vapor and mists. Avoid skin contact. During use and until all vapors are gone: Keep area ventilated. Do not smoke. Extinguish all flames, pilot lights, and heaters. Turn off stoves, electric tools and appliances, and other sources of ignition. Consult NFPA Code. Use approved bonding and grounding

LOCTITE CORPORATION

10/20/98

ROCKY HILL, CONNECTICUT 06067 EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET

Page 04 of 06

Item No.: 81847

7. HANDLING AND STORAGE

(continued)

procedures. Do not puncture, incinerate, or expose to temperature above 120°F. Heat from sunlight radiators, stoves, hot water, and other heat sources could cause container to burst. Do not take internally. Keep out of the reach of children Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

Wash hands after using.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Eyes: Wear safety spectacles with unperforated

sideshields.

Skin: Chemical resistant gloves.

Ventilation: Local exhaust preferable. General exhaust

acceptable if the exposure to materials in Section II is maintained below applicable exposure limits.

Refer to OSHA Standards 1910.94, 1910.107,

1910.108.

Respiratory If personal exposure cannot be controlled below

applicable limits by ventilation, wear a properly fitted organic/particulate respirator approved by NIOSH/MSHA for protection against materials in Section II. When sanding, wirebrushing, abrading

burning or welding the dried film, wear a

particulate respirator approved by OSHA/MSHA for protection against non-volatile materials in

Section II.

See Section 2 for Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light brown liquid

Odor: Pungent

Boiling Point: Range: Less than 0°F to 340°F.

pH: Not available Solubility in Water: Not available

Solubility in Water: Not available Specific Gravity 0.76 (Base only)

Volatile Organic Compound

(EPA Method 24) 50.4%; 378 grams per liter of material

(Less federally exempt solvents)

Vapor Pressure: Not available

Vapor Density: More than 1 (base only)

Evaporation Rate

(Ether = 1) Faster

LOCTITE CORPORATION 10/20/98

ROCKY HILL, CONNECTICUT 06067 EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET Page 05 of 06

Item No.: 81847

10. STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatibility: None

Conditions to Avoid: Not available

Hazardous Decomposition

Products (non-thermal): None

11. TOXICOLOGICAL INFORMATION

See Section 3.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Recommended methods of

disposal: Do not incinerate. Depressurize container.

Dispose of in accordance with federal, state and

and local regulations.

EPA Hazardous Waste

Number D001 - Hazardous waste per 40CFR 261.21

14. TRANSPORTATION INFORMATION

DOT (49 CFR 172)

Domestic Ground Transport

Proper Shipping Name: Consumer Commodity

Hazard Class or

Division: ORM-D
Identification Number: None
Marine Pollutant: None

IATA

Proper Shipping Name: Consumer Commodity (Not more than 500 ml);

Aerosols, flammable n.o.s. (More than 500 ml)

Class or Division: Class 9 (Not more than 500 ml);

Division 2.1 (More than 500 ml)

UN or ID Number: ID 8000 (Not more than 500 ml); UN 1950 (More than 500 ml)

15. REGULATORY INFORMATION

CA Proposition 65: WARNING: This product contains chemicals known to

the State of California to cause cancer and birth defects or other reproductive

harm.

Ethylene oxide (trace amount)

LOCTITE CORPORATION 10/20/98

ROCKY HILL, CONNECTICUT 06067 EMERGENCY PHONE: (860) 571-5100

MATERIAL SAFETY DATA SHEET Page 06 of 06

Item No.: 81847

16. OTHER INFORMATION

Estimated NFPA(R) Code:

Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 1

Specific Hazard: Does not apply

Estimated HMIS(R) Code:

Health Hazard: 2*
Flammability Hazard: 3
Reactivity Hazards: 1

Personal Protection: See Section 8.

NFPA is a registered trademark of the National Fire Protection Assn. HMIS is a registered trademark of the National Paint and Coatings Assn.

Prepared By: Stephen Repetto

Title: Research Chemist- Safety, Health& Regulatory Affairs

Company: Loctite Corp., 1001 Tr Br Cr, Rocky Hill CT 06067

(24hr.) Phone: (860) 571-5100

Revision Date: December 02, 1997 Revision: 0004

 $\frac{application\ assistance\ .\ browse\ catalog\ .\ \underline{distributor\ locator}\ .\ \underline{datasheets}\ .\ \underline{what's\ new}}{about\ loctite\ .\ \underline{literature}\ .\ \underline{loctite\ world\ wide}\ .\ \underline{search}\ .\ \underline{home}}_{copyright\ \odot\ 1997-1998\ Loctite}$