

# Safety Data Sheet according to Regulation (EC) No 1907/2006

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# LOCTITE LB 8008 C5-A known as LOCTITE® ANTI-SEIZE LUBRICANT

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# **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### 1.1. Product identifier

LOCTITE LB 8008 C5-A known as LOCTITE® ANTI-SEIZE LUBRICANT

#### **Contains:**

Calcium dihydroxide

**1.2. Relevant identified uses of the substance or mixture and uses advised against** Intended use: Lubricant

#### 1.3. Details of the supplier of the safety data sheet

Henkel Ltd Wood Lane End HP2 4RQ Hemel Hempstead

#### Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

# **1.4. Emergency telephone number**

24 Hours Emergency Tel: +44 (0)1442 278497

# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

# Classification (CLP):

Skin irritation H315 Causes skin irritation. Serious eye damage H318 Causes serious eye damage. Category 2

Category 1

2.2. Label elements

Label elements (CLP):

Hazard	pictogram:



Hazard statement:	H315 Causes skin irritation. H318 Causes serious eye damage.
Precautionary statement:	***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements***
Precautionary statement: Prevention	P280 Wear eye protection/face protection.
Precautionary statement: Response	P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### 2.3. Other hazards

None if used properly.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### General chemical description:

Lubricant

#### Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Calcium dihydroxide 1305-62-0	215-137-3 01-2119475151-45	10- 20 %	Skin Irrit. 2; Dermal H315 Eye Dam. 1 H318 STOT SE 3; Inhalation H335
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO 64742-53-6	265-156-6 01-2119480375-34	10- 20 %	Asp. Tox. 1 H304
Copper 7440-50-8	231-159-6 01-2119480154-42	10- 20 %	Aquatic Acute 1 H400 Aquatic Chronic 3 H412

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

# **SECTION 4: First aid measures**

## 4.1. Description of first aid measures

Inhalation: Move to fresh air. If symptoms persist, seek medical advice.

Skin contact: Rinse with running water and soap. Obtain medical attention if irritation persists.

Eye contact: Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist. Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

# **4.2. Most important symptoms and effects, both acute and delayed** SKIN: Redness, inflammation.

After eye contact: Corrosive, may cause permanent damage to eyes (impairment of vision).

# 4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

# **SECTION 5: Firefighting measures**

**5.1. Extinguishing media Suitable extinguishing media:** Carbon dioxide, foam, powder

**Extinguishing media which must not be used for safety reasons:** None known

#### 5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx) can be released.

# **5.3.** Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear.

#### Additional information:

In case of fire, keep containers cool with water spray.

#### **SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures** Avoid skin and eye contact.

#### **6.2. Environmental precautions**

Do not let product enter drains.

#### 6.3. Methods and material for containment and cleaning up

For small spills wipe up with paper towel and place in container for disposal. For large spills absorb onto inert absorbent material and place in sealed container for disposal.

#### 6.4. Reference to other sections

See advice in section 8

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

Use only in well-ventilated areas. Avoid skin and eye contact. Prolonged or repeated skin contact should be avoided to minimise any risk of sensitisation. See advice in section 8

#### Hygiene measures:

Good industrial hygiene practices should be observed. Do not eat, drink or smoke while working. Wash hands before work breaks and after finishing work.

# 7.2. Conditions for safe storage, including any incompatibilities

Refer to Technical Data Sheet

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**7.3. Specific end use(s)** Lubricant

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium dihydroxide 1305-62-0 [CALCIUM HYDROXIDE]		5	Time Weighted Average (TWA):		EH40 WEL
Calcium dihydroxide 1305-62-0 [CALCIUM DIHYDROXIDE]		5	Time Weighted Average (TWA):	Indicative	ECTLV
Copper 7440-50-8 [COPPER, FUME]		0,2	Time Weighted Average (TWA):		EH40 WEL
Copper 7440-50-8 [COPPER, INHALABLE DUSTS AND MISTS (AS CU)]		1	Time Weighted Average (TWA):		EH40 WEL
Copper 7440-50-8 [COPPER, INHALABLE DUSTS AND MISTS (AS CU)]		2	Short Term Exposure Limit (STEL):		EH40 WEL
Graphite 7782-42-5 [GRAPHITE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Graphite 7782-42-5 [GRAPHITE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Graphite 7782-42-5 [DUST, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Graphite 7782-42-5 [DUST, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium dihydroxide 1305-62-0 [CALCIUM DIHYDROXIDE]		5	Time Weighted Average (TWA):	Indicative	ECTLV
Calcium dihydroxide 1305-62-0 [CALCIUM HYDROXIDE]		5	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5 [MINERAL OIL, PURE, HIGHLY & SEVERELY REFINED, INHALABLE FRACTION]		5	Time Weighted Average (TWA):		IR_OEL
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO 64742-53-6 [MINERAL OIL, PURE, HIGHLY & SEVERELY REFINED, INHALABLE FRACTION]		5	Time Weighted Average (TWA):		IR_OEL
Copper 7440-50-8 [COPPER (AS CU), DUSTS AND MISTS]		1	Time Weighted Average (TWA):		IR_OEL
Copper 7440-50-8		0,2	Time Weighted Average (TWA):		IR_OEL

[COPPER (AS CU), FUME] Copper 7440-50-8 [COPPER (AS CU), DUSTS AND MISTS]	2	Short Term Exposure Limit (STEL):	IR_OEL
Graphite 7782-42-5 [GRAPHITE, RESPIRABLE DUST]	4	Time Weighted Average (TWA):	IR_OEL
Graphite 7782-42-5 [GRAPHITE, TOTAL INHALABLE DUST]	10	Time Weighted Average (TWA):	IR_OEL
Graphite 7782-42-5 [DUSTS, NON-SPECIFIC, RESPIRABLE]	4	Time Weighted Average (TWA):	IR_OEL
Graphite 7782-42-5 [DUSTS, NON-SPECIFIC, TOTAL INHALABLE]	10	Time Weighted Average (TWA):	IR_OEL

# Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value		Remarks		
			mg/l	ppm	mg/kg	others	
Calcium dihydroxide 1305-62-0	aqua (freshwater)		0,49 mg/l				
Calcium dihydroxide 1305-62-0	aqua (marine water)		0,32 mg/l				
Calcium dihydroxide 1305-62-0	aqua (intermittent releases)		0,49 mg/l				
Calcium dihydroxide 1305-62-0	sewage treatment plant (STP)		3 mg/l				
Calcium dihydroxide 1305-62-0	soil				1080 mg/kg		
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO 64742-53-6	oral				9,33 mg/kg		
Copper 7440-50-8	soil				65 mg/kg		
Copper 7440-50-8	sewage treatment plant (STP)		230 µg/l				
Copper 7440-50-8	sediment (marine water)				676 mg/kg		
Copper 7440-50-8	aqua (freshwater)		7,8 µg/l				
Copper 7440-50-8	aqua (marine water)		5,2 µg/l				
Copper 7440-50-8	sediment (freshwater)				87 mg/kg		

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# **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Calcium dihydroxide 1305-62-0	Workers	Inhalation	Acute/short term exposure - local effects		4 mg/m3	
Calcium dihydroxide 1305-62-0	Workers	Inhalation	Long term exposure - local effects		1 mg/m3	
Calcium dihydroxide 1305-62-0	General population	Inhalation	Acute/short term exposure - local effects		4 mg/m3	
Calcium dihydroxide 1305-62-0	General population	Inhalation	Long term exposure - local effects		1 mg/m3	
Copper 7440-50-8	Workers	dermal	Acute/short term exposure - systemic effects		273 mg/kg	
Copper 7440-50-8	General population	inhalation	Acute/short term exposure - systemic effects		20 mg/m3	
Copper 7440-50-8	General population	inhalation	Acute/short term exposure - local effects		1 mg/m3	
Copper 7440-50-8	General population	inhalation	Long term exposure - local effects		1 mg/m3	
Copper 7440-50-8	General population	dermal	Acute/short term exposure - systemic effects		273 mg/kg	
Copper 7440-50-8	Workers	dermal	Long term exposure - systemic effects		137 mg/kg	
Copper 7440-50-8	General population	dermal	Long term exposure - systemic effects		137 mg/kg	
Copper 7440-50-8	Workers	inhalation	Acute/short term exposure - systemic effects		20 mg/m3	
Copper 7440-50-8	Workers	inhalation	Long term exposure - local effects		1 mg/m3	
Copper 7440-50-8	Workers	inhalation	Acute/short term exposure - local effects		1 mg/m3	

#### Biological Exposure Indices: None

# 8.2. Exposure controls:

Respiratory protection: Ensure adequate ventilation. An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area Filter type: A (EN 14387) Hand protection:

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 mm thickness)

This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection: Wear protective glasses. Protective eye equipment should conform to EN166.

Skin protection: Wear suitable protective clothing. Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Appearance paste						
Appearance	1					
Odor	copper mild					
Odour threshold						
Odour threshold	No data available / Not applicable					
pH	No data available / Not applicable					
Initial boiling point	> 260 °C (> 500 °F)					
Flash point	> 93 °C (> 199.4 °F)					
Decomposition temperature	No data available / Not applicable					
Vapour pressure	< 0,6 mbar					
Density	1,3 g/cm3					
0						
Bulk density	No data available / Not applicable					
Viscosity	No data available / Not applicable					
Viscosity (kinematic)	No data available / Not applicable					
Explosive properties	No data available / Not applicable					
Solubility (qualitative)	Insoluble					
(Solvent: Water)						
Solidification temperature	No data available / Not applicable					
Melting point	No data available / Not applicable					
Flammability	No data available / Not applicable					
Auto-ignition temperature	No data available / Not applicable					
Explosive limits	No data available / Not applicable					
Partition coefficient: n-octanol/water	No data available / Not applicable					
Evaporation rate	No data available / Not applicable					
Vapor density	No data available / Not applicable					
Oxidising properties	No data available / Not applicable					
*	**					

#### 9.2. Other information

No data available / Not applicable

#### 10.1. Reactivity

Reaction with strong acids. Reacts with strong oxidants.

#### **10.2.** Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

See section reactivity

## **10.4.** Conditions to avoid

No decomposition if used according to specifications.

#### **10.5. Incompatible materials**

See section reactivity.

#### 10.6. Hazardous decomposition products

Oxides of carbon. Hydrocarbons

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### General toxicological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

#### **Oral toxicity:**

May cause irritation to the digestive tract.

#### Skin irritation:

Causes skin irritation.

#### Eye irritation:

Causes serious eye damage.

#### Acute oral toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Calcium dihydroxide	LD50	> 7.340 mg/kg	oral		rat	OECD Guideline 401 (Acute
1305-62-0						Oral Toxicity)
Distillates (petroleum),	LD50	> 5.000 mg/kg	oral		rat	not specified
hydrotreated light						-
naphthenic < 3% DMSO						
64742-53-6						

#### Acute inhalative toxicity:

Hazardous components	Value	Value	Route of	Exposure	Species	Method
CAS-No.	type		application	time		
Distillates (petroleum),	LC50	> 5,53 mg/l	aerosol	4 h	rat	OECD Guideline 403 (Acute
hydrotreated light						Inhalation Toxicity)
naphthenic < 3% DMSO						
64742-53-6						
Copper	LC50	> 5,11 mg/l		4 h	rat	OECD Guideline 436 (Acute
7440-50-8						Inhalation Toxicity: Acute
						Toxic Class (ATC) Method)

# Acute dermal toxicity:

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
Calcium dihydroxide 1305-62-0	LD50	> 2.500 mg/kg	dermal		rat	OECD Guideline 402 (Acute Dermal Toxicity)
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO 64742-53-6	LD50	> 5.000 mg/kg	dermal		rabbit	not specified

#### Skin corrosion/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Calcium dihydroxide 1305-62-0	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

#### Serious eye damage/irritation:

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Calcium dihydroxide 1305-62-0	Category 1 (irreversible effects on the eye)		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

# Germ cell mutagenicity:

Hazardous components	Result	Type of study /	Metabolic	Species	Method
CAS-No.		Route of administration	activation / Exposure time		
Calcium dihydroxide 1305-62-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Distillates (petroleum), hydrotreated light naphthenic < 3% DMSO 64742-53-6	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Copper 7440-50-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Copper 7440-50-8	negative	oral: gavage		mouse	EU Method B.12 (Mutagenicity
	negative			rat	OECD Guideline 486 (Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells in vivo)

# **SECTION 12: Ecological information**

#### General ecological information:

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

### 12.1. Toxicity

#### **Ecotoxicity:**

Do not empty into drains / surface water / ground water.

Hazardous components	Value	Value	Acute	Exposure	Species	Method
CAS-No.	type	, unde	Toxicity Study	time	opecies	
Calcium dihydroxide	LC50	50,6 mg/l	Fish	96 h	Oncorhynchus mykiss	OECD Guideline
1305-62-0	LCJU	50,0 mg/1	1 1511	<i>70</i> II	Oneomynenus mykiss	203 (Fish, Acute
1000 02 0						Toxicity Test)
Calcium dihydroxide	EC50	49,1 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
1305-62-0		-	-			202 (Daphnia sp.
						Acute
						Immobilisation
	5050	104.57		70.1		Test)
Calcium dihydroxide 1305-62-0	EC50	184,57 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline 201 (Alga, Growth
1303-02-0						Inhibition Test)
	NOEC	48 mg/l	Algae	72 h	Pseudokirchnerella subcapitata	OECD Guideline
			8			201 (Alga, Growth
						Inhibition Test)
Calcium dihydroxide	EC20	229,2 mg/l	Bacteria	3 h	activated sludge of a	OECD Guideline
1305-62-0					predominantly domestic sewage	
						Sludge, Respiration
Calcium dihydroxide	NOEC	32 mg/l	chronic	14 d	Crangon septemspinosa	Inhibition Test) OECD Guideline
1305-62-0	NOEC	52 mg/1	Daphnia	14 u	Crangon septemspinosa	202 (Daphnia sp.
1505-02-0			Dapinna			202 (Daphina sp. Chronic
						Immobilisation
						Test)
Distillates (petroleum),	LL50	> 100 mg/l	Fish	96 h	Pimephales promelas	OECD Guideline
hydrotreated light naphthenic						203 (Fish, Acute
< 3% DMSO						Toxicity Test)
64742-53-6 Distillates (petroleum),	EC50	> 1.000 mg/l	Daphnia	48 h	Daphnia magna	not specified
hydrotreated light naphthenic	EC30	> 1.000 mg/1	Dapinna	40 11	Daphina magna	not specified
< 3% DMSO						
64742-53-6						
Copper	LC 50	> 0,1 - 1 mg/l	Fish	96 h	not specified	OECD Guideline
7440-50-8						203 (Fish, Acute
	NOFC	. 0 1 1 /	F" 1	20.1		Toxicity Test)
	NOEC	> 0,1 - 1 mg/l	Fish	28 d	not specified	OECD Guideline 210 (fish early lite
						stage toxicity test)
Copper	EC50	> 0,1 - 1  mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline
7440-50-8			1		1 0	202 (Daphnia sp.
						Acute
						Immobilisation
Correct	ECEO	> 0 1 1 /1	A1	70 1-	not on : C - 1	Test)
Copper 7440-50-8	EC50	> 0,1 - 1 mg/l	Algae	72 h	not specified	OECD Guideline 201 (Alga, Growth
7-14-0-30-0						Inhibition Test)
	NOEC	> 0,1 - 1 mg/l	Algae	72 h	not specified	OECD Guideline
			0		T T	201 (Alga, Growth
						Inhibition Test)
Copper	EC50	> 0,1 - 1 mg/l	Bacteria	3 h	activated sludge	OECD Guideline
7440-50-8						209 (Activated
						Sludge, Respiration
Copper	NOEC	> 0,1 - 1 mg/l	chronic	21 d	Daphnia magna	Inhibition Test) OECD 211
7440-50-8	NOEC	> 0,1 - 1 mg/1	Daphnia	21 u	Dapinna magna	(Daphnia magna,
						Reproduction Test)
	I I		1	I	I	reproduction rest)

# 12.2. Persistence and degradability

**Persistence and Biodegradability:** The product is not biodegradable.

	Hazardous components CAS-No.	Result	Route of application	Degradability	Method
ĺ	Copper 7440-50-8	Rapidly degradable	not specified	> 60 %	OECD 301 A - F

# 12.3. Bioaccumulative potential / 12.4. Mobility in soil

Mobility: Cured adhesives are immobile.

# **Bioaccumulative potential:**

No data available.

#### 12.5. Results of PBT and vPvB assessment

Hazardous components CAS-No.	PBT/vPvB
Calcium dihydroxide	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1305-62-0	Bioaccumulative (vPvB) criteria.
Distillates (petroleum), hydrotreated light	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
naphthenic < 3% DMSO	Bioaccumulative (vPvB) criteria.
64742-53-6	
Copper	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
7440-50-8	Bioaccumulative (vPvB) criteria.

#### 12.6. Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Product disposal:

Cured adhesive: Dispose of as water insoluble non-toxic solid chemical in authorised landfill or incinerate under controlled conditions.

Dispose of in accordance with local and national regulations.

Contribution of this product to waste is very insignificant in comparison to article in which it is used

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Disposal must be made according to official regulations.

Waste code

14 06 03 Other solvents and solvent mixtures

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

# **SECTION 14: Transport information**

14.1.	UN number					
	ADR	Not dangerous goods				
	RID	Not dangerous goods				
	ADN	Not dangerous goods				
	IMDG	3082				
	IATA	Not dangerous goods				
14.2.	UN proper shipping name					
	ADR	Not dangerous goods				
	RID	Not dangerous goods				
	ADN	Not dangerous goods				
	IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Copper)				
	IATA	Not dangerous goods				
14.3.	Transport haza	urd class(es)				
	ADR	Not dangerous goods				
	RID	Not dangerous goods				
	ADN	Not dangerous goods				
	IMDG	9				
	IATA	Not dangerous goods				
14.4.	Packing group					
	ADR	Not dangerous goods				
	RID	Not dangerous goods				
	ADN	Not dangerous goods				
	IMDG	III				
	IATA	Not dangerous goods				
14.5.	Environmental	hazards				
	ADR	not applicable				
	RID	not applicable				
	ADN	not applicable				
	IMDG	Marine pollutant				
	IATA	not applicable				
14.6.	Special precaut	ions for user				
	ADR	not applicable				
	RID	not applicable				
	ADN	not applicable				
	IMDG	No dangerous good according to ADR/RID/ADN. Carriage in accordance with				
		1.1.4.2.1 ADR/RID/ADN.				
	IATA	not applicable				
14.7.	Transport in b	alk according to Annex II of Marpol and the IBC Code				
	not applicable					

# **SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC content (2010/75/EC)

#### **15.2.** Chemical safety assessment

A chemical safety assessment has not been carried out.

# **SECTION 16: Other information**

The labelling of the product is indicated in Section 2. The full text

of all abbreviations indicated by codes in this safety data sheet are as follows:

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

#### **Further information:**

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.



# LOCTITE<sup>®</sup> LB 8008 C5-A™

Known as LOCTITE<sup>®</sup> 8008<sup>™</sup> or LOCTITE<sup>®</sup> C5-A<sup>®</sup> January 2015

#### PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> LB 8008 C5-A<sup>™</sup> provides the following product characteristics:

Technology	Anti-Seize
Appearance	Smooth copper colored paste <sup>LMS</sup>
Cure	Non-curing
Application	Lubrication

LOCTITE<sup>®</sup> LB 8008 C5-A<sup>™</sup> provides a shield against high temperature seizing and galling. All mated parts, studs, bolts, flanges and gaskets, remove more easily and in cleaner and better condition. This product can be used on copper, brass, cast iron, steel, all alloys including stainless steel, all plastics and all non-metallic gasketing materials. Typical applications include original equipment and maintenance, and equipment associated with petroleum chemicals, steel mills, power plants, marine and foundries. This product is typically used in applications with an operating range of -29 °C to +982 °C.

## TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.2 to 1.4 <sup>LMS</sup>
Density @ 25 °C, g/ml	1.27
Flash Point - See SDS	
Solids/Non-Volatile Content, %	40
Penetration, ISO 2137, 1/10 mm	320 to 380 <sup>LMS</sup>

#### TYPICAL PERFORMANCE

An anti-seize lubricant used on a bolt helps to develop greater clamp load for the same torque compared to an unlubricated bolt. An additional benefit is greater uniformity in clamp load among a series of bolts. The relationship between torque and clamp load is expressed in the following equation:

#### T = K x F x D

- **T** = Torque (N·m, lb.in, lb.ft)
- K = Torque coefficient or nut factor, determine experimentally
- **F** = Clamp load (N, lb.)
- **D** = Nominal diameter of bolt (mm, in.)

Torque coefficient, k:	
12.7 mm steel bolts (grade 8) and	0.16
nuts (grade 5)	
12.7 mm steel bolts (grade 8) and	0.27
nuts (grade 5), solvent cleaned, not lubricated	

#### **GENERAL INFORMATION**

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a lubricant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Safety Data Sheet (SDS).

#### Directions for use:

- 1. For best performance the mating surface should be clean and free of grease.
- 2. Note: When grinding or wire brushing, use a dust mask. Dust from cleaning threads may contain metal compounds. Inhalation may cause lung injury or other harm.
- 3. Apply thin coating to threads and flats of nuts and bolts, assemble.

#### Loctite Material Specification<sup>LMS</sup>

LMS dated November 29, 1999. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

#### Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage:** 8 °C to 21 °C. **Storage below** 8 °C or **greater than 28** °C **can adversely affect product properties**. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

#### Conversions

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm  $\ge 25.4 =$  V/mil mm / 25.4 = inches  $\mu$ m / 25.4 = mil N  $\ge 0.225 =$  lb N/mm  $\ge 5.71 =$  lb/in N/mm<sup>2</sup>  $\ge 145 =$  psi MPa  $\ge 145 =$  psi MPa  $\ge 145 =$  psi N·m  $\ge 8.851 =$  lb·in N·m  $\ge 0.738 =$  lb·ft N·mm  $\ge 0.142 =$  oz·in mPa·s = cP



#### Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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Reference 1.5