



## Safety Data Sheet

Page 1 of 8

LOCTITE 362 60EN 5C 0.71MM R known as 60/40 362 5C

SDS No. : 414868

V001.3

Revision: 08.11.2019

printing date: 29.10.2020

### Section 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** LOCTITE 362 60EN 5C 0.71MM R known as 60/40 362 5C

**Other means of identification:** LOCTITE 362 60EN 5C 0.71MM R

**Product code:** IDH322023

**Recommended use of the chemical and restrictions on use**

**Intended use:** Solder Wire

**Identification of manufacturer, importer or distributor**

**Manufacturer:** Henkel Malaysia Sdn Bhd Lot 62049, Jalan Portland, Tasek Industrial Estate, 31400 Ipoh, Perak, Malaysia.  
Phone : +605 5476811 Fax : +605 5471868

**E-mail address of person responsible for Safety Data Sheet:** ap-ua-psra.sea@henkel.com

**Emergency information:** FOR EMERGENCIES ONLY (Spill, major leak, Fire, Exposure, or Accident). Call CHEMTREC: +1 703-741-5970

### Section 2. Hazards identification

**GHS Classification:**

<u>Hazard Class</u>	<u>Hazard Category</u>
Toxic to reproduction	Category 1A
Effects on or via lactation	
Specific target organ toxicity - repeated exposure	Category 1

**GHS label elements:**

**Hazard pictogram:**



**Signal word:**

Danger

**Hazard statement:** H360 May damage fertility or the unborn child.  
H362 May cause harm to breast-fed children.  
H372 Causes damage to organs (Blood, Kidney, Central Nervous system) through prolonged or repeated exposure (inhalation-dust, oral)

**Precaution:**

**Prevention:** P201 Obtain special instructions before use.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P263 Avoid contact during pregnancy and while nursing.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** P308+P313 IF exposed or concerned: Get medical advice/attention.

**Disposal:** P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Section 3. Composition / information on ingredients**

**Substance or Mixture:**  
Mixture

**Declaration of hazardous chemical:**

Hazard component CAS-No.	Content	GHS Classification
Tin 7440-31-5	30- 60 %	
Lead 7439-92-1	30- 60 %	Toxic to reproduction 1A H360 Effects on or via lactation H362 Specific target organ toxicity - repeated exposure 1; Oral, Inhalation H372

**Section 4. First aid measures**

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

**Skin contact:** Immediately wash skin thoroughly with soap and water.  
Obtain medical attention if irritation persists.

**Eye contact:** Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**Ingestion:** Do not induce vomiting.  
Seek medical advice.

**Section 5. Fire fighting measures**

**Suitable extinguishing media:** Carbon dioxide, foam, powder

Fine water spray

**Special protection equipment and precautions for firefighters:** Wear self-contained breathing apparatus.

**Hazardous combustion products:** High temperatures may produce heavy metal dust, fumes or vapours.

### Section 6. Accidental release measures

**Personal precautions:** Avoid contact with skin and eyes.  
See advice in section 8

**Environmental precautions:** Do not empty into drains / surface water / ground water.  
Do not allow to enter the ground / soil.

**Clean-up methods:** Scrape up spilled material and place in a closed container for disposal.

### Section 7. Handling and storage

**Handling:** Use only in well-ventilated areas.  
Avoid skin and eye contact.  
When using do not eat, drink or smoke.  
Wash hands before breaks and immediately after handling the product.  
Avoid breathing fumes given out during soldering.  
Keep out of the reach of children.  
See advice in section 8

**Storage:** Store at room temperature.

**Section 8. Exposure controls / personal protection**

Components with specific control parameters for workplace:

TIN, METAL 7440-31-5	<b>Value type</b>	Time Weighted Average (TWA):
	<b>mg/m<sup>3</sup></b>	2
	<b>Remarks</b>	MY OEL
TIN, METAL, INHALABLE FRACTION 7440-31-5	<b>Value type</b>	Time Weighted Average (TWA):
	<b>mg/m<sup>3</sup></b>	2
	<b>Remarks</b>	ACGIH
LEAD AND INORGANIC COMPOUNDS, AS PB 7439-92-1	<b>Value type</b>	Time Weighted Average (TWA):
	<b>mg/m<sup>3</sup></b>	0.05
	<b>Remarks</b>	ACGIH
LEAD, ELEMENTAL AND INORGANIC COMPOUNDS, AS PB 7439-92-1	<b>Value type</b>	Time Weighted Average (TWA):
	<b>mg/m<sup>3</sup></b>	0.05
	<b>Remarks</b>	MY OEL

- Respiratory protection:** In case of insufficient ventilation, wear suitable respiratory equipment.
- 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.
- Engineering controls:** Ensure adequate ventilation, especially in confined areas.  
Extraction is necessary to remove fumes evolved during reflow.  
Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.
- Hygienic measures:** After handling solder wash hands with soap and water before eating, drinking or smoking.

**Section 9. Physical and chemical properties**

- Appearance:** grey  
solid, Wire
- Odor:** odourless
- Odor threshold (CA):** No data available.
- pH:** No data available.
- Melting point / freezing point:** 183.0 - 188.0 °C (361.4 - 370.4 °F)
- Specific gravity:** 8.5
- Boiling point:** No data available.
- Flash point:** Not applicable
- Evaporation rate:** No data available.
- Flammability (solid, gas):** No data available.
- Lower explosive limit:** No data available.

<b>Upper explosive limit:</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Density:</b>	8.5 g/cm <sup>3</sup>
<b>Solubility:</b>	Insoluble
<b>Partition coefficient: n-octanol/water:</b>	No data available.
<b>Auto ignition:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.
<b>VOC content:</b> (2010/75/EC)	< 3 %

### Section 10. Stability and reactivity

<b>Reactivity/Incompatible materials:</b>	Strong oxidizing agents.
<b>Conditions to avoid:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Thermal decomposition can lead to release of irritating gases and vapors.

### Section 11. Toxicological information

Symptoms of Overexposure: Flux fumes may irritate the nose, throat and lungs and may after prolonged/repeated exposure give an allergic reaction (asthma).  
Prolonged or repeated contact may cause skin irritation.  
Prolonged or repeated contact may cause eye irritation.

**Acute oral toxicity:**

Tin 7440-31-5	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 423 (Acute Oral toxicity)
Lead 7439-92-1	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 423 (Acute Oral toxicity)

**Acute inhalative toxicity:**

Lead 7439-92-1	Value type	LC50
	Value	> 5.05 mg/l
	Exposure time	4 h
	Species	rat
	Method	OECD Guideline 403 (Acute Inhalation Toxicity)

**Acute dermal toxicity:**

Tin 7440-31-5	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)
Lead 7439-92-1	Value type	LD50
	Value	> 2,000 mg/kg
	Species	rat
	Method	OECD Guideline 402 (Acute Dermal Toxicity)

**Skin corrosion/irritation:**

Tin 7440-31-5	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious eye damage/irritation:**

Tin 7440-31-5	Result	not irritating
	Exposure time	
	Species	rabbit
	Method	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Germ cell mutagenicity:**

Tin 7440-31-5	Result	negative
	Type of study / Route of administration	bacterial reverse mutation assay (e.g Ames test)
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Tin 7440-31-5	Result	negative
	Type of study / Route of administration	in vitro mammalian chromosome aberration test
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Tin 7440-31-5	Result	negative
	Type of study / Route of administration	mammalian cell gene mutation assay
	Metabolic activation / Exposure time	with and without
	Method	OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

**Repeated dose toxicity:**

Tin 7440-31-5	Result	NOAEL=> 1,000 mg/kg
	Route of application	oral: gavage
	Exposure time / Frequency of treatment	28 daysdaily
	Species	rat
	Method	OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)

**Section 12. Ecological information****Ecotoxicity:**

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

### Section 13. Disposal considerations

#### Product

**Method of disposal:** Dispose of in accordance with local and national regulations.

#### Packaging

**Disposal of uncleaned packages:** Dispose of as unused product.

### Section 14. Transport information

**Road transport ADR:**

Not dangerous goods

**Railroad transport RID:**

Not dangerous goods

**Inland water transport ADN:**

Not dangerous goods

**Marine transport IMDG:**

Not dangerous goods

**Air transport IATA:**

Not dangerous goods

### Section 15. Regulatory information

**Regulatory Information:** Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 [P.U.(A) 310/213]  
Industry Code of Practice on Chemicals Classification and Hazard Communication

**Global inventory status:**

Regulatory list	Notification
EINECS	yes
TSCA	yes
AICS	yes
DSL	yes
ENCS (JP)	yes
KECI (KR)	yes
IECSC	yes
ISHL (JP)	yes
NZIOC	yes

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### Section 16. Other information

**Disclaimer:**

This Safety Data Sheet has been generated based on Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013 [P.U.(A) 310/213]only. No warranty or representation of any kind is given with respect to the substantive or export laws of any other jurisdiction or country. Please confirm that the information provided herein conforms to the substantive export or other law of any other jurisdiction prior to export. Please contact Henkel Product Safety and Regulatory Affairs for additional assistance. 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.

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