

SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name SOLDER ACE E28 RH60B

Company Identification

Name of Supplier NIHON GENMA MFG. CO., LTD.
Address of Supplier 16-4, Mitsuyakita-2, Yodogawa-Ku, Osaka, Japan
Department in charge Technical department
Person in charge Junichi Takenaka
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SDS No. SDS- E021243
Recommended and restrictions of use of the products Soldering process

2. HAZARD IDENTIFICATION

GHS Classification

<Physical Hazards>		<Health Hazards>	
Explosives	Not Applicable	Acute toxicity, oral	Not Classified
Flammable gases	Not Applicable	Acute toxicity, dermal	Not Classified
Flammable aerosols	Not Applicable	Acute toxicity [inhalation:gas]	Not Classified
Oxidizing gases	Not Applicable	Acute toxicity [inhalation:vapor]	Classification Not Possible
Gases under pressure	Not Applicable	Acute toxicity [inhalation:dust and mist]	Category 4
Flammable liquids	Not Applicable	Skin corrosion/irritation	Not Classified
Flammable solids	Classification Not Possible	Eye damage/irritation	Not Classified
Self-reactive substances and liquids	Not Applicable	Respiratory sensitization	Category 1
Pyrophoric liquids	Not Applicable	Skin seneitization	Category 1
Pyrophoric solids	Not Applicable	Germ cell mutagenicity	Category 2
Self-heating substances and mixtures	Not Applicable	Carcinogenicity	Category 2
Substances and mixtures which, in contact with water, emit flammable gases	Classification Not Possible	Reproductive toxicity	Category 1A
Oxidizing liquids	Not Applicable	Specific target organ toxicity (single exposure)	Not Classified
Oxidizing solids	Not Applicable	Specific target organ toxicity (repeated exposure)	Category 1
Organic peroxides	Not Applicable	Aspiration hazard	Classification Not Possible
Substance and mixtures corrosive to metals	Classification Not Possible	<Environmental Hazards>	
		Hazardous to the aquatic environment-Acute hazard	Not Classified
		Hazardous to the aquatic environment-Chronic hazard	Not Classified

Label Elements

Symbols/Pictograms



Signal Word

Danger

Hazardous Information

- H317 May cause an allergic skin reaction
- H332 Harmful if inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H340 May cause genetic defects
- H351 Suspected of causing cancer
- H360 May damage fertility or the unborn child
- H372 Cause damage to organs through prolonged or repeated exposure

Instructions

- Precaution
 - Obtain special instructions before use. (P201)
 - Do not handle until all safety precautions have been read and understood.(P202)
 - Do not breathe dust/fume/gas/mist/vapours/spray. (P260)
 - Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)
 - Wash hands thoroughly after handling. (P264)
 - Do not eat, drink or smoke when using this product. (P270)
 - Use only outdoors or in a well-ventilated area. (P271)
 - Contaminated work clothing should not be allowed out of the workplace. (P272)
 - Wear protective gloves/protective clothing/eye protection/face protection. (P280)
 - Use personal protective equipment as required. (P281)
- Reponse
 - In case of inadequate ventilation wear respiratory protection. (P285)
 - IF ON SKIN: Wash with plenty of soap and water. (P302+P352)
 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. (P304+P341)
 - IF exposed or concerned: Get medical advice/attention. (P308+P313)
 - Call a POISON CENTER or doctor/physician if you need feel unwell. (P312)
 - Get medical advice/attention if you feel unwell. (P314)
 - If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. (P342+P311)
 - Wash contaminated clothing before reuse. (P363)
- Storage
 - Store in a container. (P405-2)
- Disposal
 - Dispose of contents/container to in accordance with local/regional/national/international regulations. (P501)

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Single Substance or Mixture Mixture
Chemical name Flux cored solder wire

Composition

Material name	Chemical formula	CAS No	Official file number	Content wt%
Tin	Sn	7440-31-5	-	58.9
Lead	Pb	7439-92-1	-	39.3
Rosin	-	Trade secret	-	1.8
Miscellaneous	-	-	-	0

4. FIRST-AID MEASURES

- Eye contact Flush eye well with plenty running water for 15 minutes, including under eyelids.
See physician.
- Skin contact Wash with plenty of soap and water.
- Inhalation Remove to fresh air and call physician.
- Ingestion Spit out promptly and receive treatment by doctor in case necessary afterwards.

5. FIRE-FIGHTING MEASURES

Extinguishant Dry chemical, airfoam, carbon dioxide.
 Specific fire fighting method Fire fighting perform from the windward and remove in flammables.
 Prohibited extinguisher "Water" For melted metal to pour water is strictly prohibited.
 Protection for fire fighters Stand in the windward, wear tools for protection for breathing and do not inhale outbreak gas.

6. ACCIDENTAL RELEASE MEASURES

Attention for the human body The collection work sholud be carried out from windward with protection glasses, gloves, mask.
 Attention for the environment Pay attention not to flow out into the public waters.
 Removal method Scoop up excess material and wash affected area with soap and water.
 Handling of repossession: refer to "13. Attention of disposal".
 In case of small amount, wipe off with organic solvent.

7. HANDLING AND STORAGE

Handling Do not touch this product with bare hand. If this product is in contact with skin, wash the hand with alcohol or water with soap.
 Ware protection glass and mask in operation.
 Instructions Ventilate the room sufficiently in operation. Take care not to inhale the vapor.
 Storage Keep in the cool and dark space.(below 10°C)
 Condition to avoid Keep Away from heat source, ignition, strong oxidizers, alkaline and acid.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment local exhaust in operation
 Exposure limit Unit mg/m³

	OSHA PEL 2009	ACGIH TWA 2009
Tin	-	2
Lead	0.05	0.05
Rosin	-	-

Personal protective equipment

Respiratory apparatus Protective mask
 Hand Protective gloves
 Eye Protective glass

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Gray metal wire		
Melting Point(METAL)	183-189 °C	Percent Volatile	No
Combustibility	Include inflammables	Specific gravity	7.5
Solubility to water	No	Ignition point	No
Flash point	No information	(main solvent)	
Flash (spontaneous combustion, reaction with water)	No	Oxidization	No information
		Boiling point	No information

10. STABILITY AND REACTIVITY

Stability This product considered stable under normal condition.
 Reactivity May react with strong acid and oxidizer, alkaline and acids.
 Condition to avoid Keep Away from heat source, ignition, strong oxidizers, alkaline and acid.
 Hazardous decomposition products In case of combustion, toxic Hume and gas are released.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	No information
Skin corrosion/irritation	No information
Eye damage/irritation	No information
Respiratory sensitization	No information
Skin sensitization	No information
Germ cell mutagenicity	(Pb) There is a description that lead itself provides chromosome aberration /
Carcinogenicity	(Pb) May cause of the carcinogenesis
Reproductive toxicity	(Pb) Fear of the bad influence to fecundity or a fetus
Specific target organ toxicity(single)	No information
Specific target organ toxicity(repeated exposure)	(Sn) fear of the obstacle to the lungs (Pb) Cardiovascular system, central nervous system, hematopoietic system, immune system, kidneys, lung, peripheral nervous system
Aspiration hazard	No information
Hazardous to the aquatic environment-Acute hazard	No information
Hazardous to the aquatic environment-Chronic hazard	No information

12. ECOLOGICAL INFORMATION

Mobility	No information
Biodegradation	No information
Bioaccumulation	No information
Fish Toxicity	No information

13. DISPOSAL CONSIDERATIONS

In accordance with state and local regulations
Metal ingredients are recyclable.

14. TRANSPORT INFORMATION

UN No.	Not Applicable
Marine pollutant	Not Applicable
Specific transport measures and condition	To avoid sunshine, high temperature and humidity, keep away from heat. Check before transport load not breakage of container, turnover and fall during transport.

15. Regulatory Information

Industrial safety and health law	•Enforcement order Article 18-2 322 Tin and its compounds •Enforcement order Article 18-2 632 Rosin
PRTR Law	•Class I Designated Chemical Substance Cabinet Order No 304 Lead 39.3%
Other Regulations	•Air Pollution Control Act Enforcement order Article 1 (hazardous substance) Lead and its compounds •Water Pollution Control Act Enforcement Act Enforcement order Article2 (hazardous substance) Lead and its compounds •Sewerage Act Enforcement Act Article 9-4 Lead and its compounds •Soil Contamination Countermeasures Act Article 1-19 Lead and its compounds

16. OTHER INFORMATION

This CSDS is created based on the information we can get at issued date. We expect accuracy, but it is not a thing of guarantee. Please perform reasonable attention for individual use and safe handling.

Because the contents of this information correspond to a normal use / condition, in case of not normal use/condition, we will assume that the responsibility is of the user.