

SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name CLEAN SOLDER SOLDER ACE TNP-NP303

Company Identification

Name of Supplier NIHON GENMA MFG. CO., LTD.
Address of Supplier 2-16-4, Mitsuyakita, Yodogawa-Ku, Osaka, Japan
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SDS No. SDS- E120905
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)	Classification Not Possible
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	Classification Not Possible
Pyrophoric liquids	Not Applicable	Skin sensitization	Category 1
Pyrophoric solids	Not Applicable	Germ cell mutagenicity	Not Classified
Self-heating substances and mixtures	Not Applicable	Carcinogenicity	Not Classified
Substances and mixtures which, in contact with water, emit flammable	Classification Not Possible	Reproductive toxicity	Classification Not Possible
Oxidizing liquids	Not Applicable	Specific target organ toxicity (single exposure)	Category 2
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
- H371 May cause damage to organs
- H372 Cause damage to organs through prolonged or repeated exposure
- H373 May cause damage to organs through prolonged or repeated exposure

Instructions

- Precaution** Do not breathe dust/fume/gas/mist/vapors/spray. (P260)
 Avoid breathing dust/fume/gas/mist/vapors/spray. (P261)
 Wash hands thoroughly after handling. (P264)
 Do not eat, drink or smoke when using this product. (P270)
 Contaminated work clothing should not be allowed out of the workplace. (P272)
 Wear protective gloves/protective clothing/eye protection/face protection. (P280)
- Response** IF ON SKIN: Wash with plenty of soap and water. (P302+P352)
 IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. (P309+P311)
 Get medical advice/attention if you feel unwell. (P314)
 If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
 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 or General name Flux cored solder wire
 Composition

Material name	Chemical formula	CAS No	Official file number	Content wt%
Tin	Sn	7440-31-5	-	93.3
Silver	Ag	7440-22-4	-	2.9
Copper	Cu	7440-50-8	-	0.48
Modified rosin	-	Trade secret	-	2.4
Miscellaneous	-	Trade secret	-	0.92

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, air foam, carbon dioxide.
- Specific fire fighting** Fire fighting perform from the windward and remove inflammables.
- 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 should 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. Wear 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. Condition to avoid Keep Away from heat source, ignition, strong oxidizers, alkaline and acid.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment	In operation, perform local exhaust
Exposure limit	Unit mg/m ³

	OSHA PEL 2009	ACGIH TWA 2009
Tin	2	2
Silver	0.01	0.1
Copper	0.1	0.2
Modified rosi	-	-

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)	217-219 °C	Percent Volatile (main solvent)	No
Combustibility	Include inflammables	Specific gravity	6.1
Solubility to water	No	Ignition point (main solvent)	No
Flash point (main solvent)	No		
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	By combustion carbon oxide, carbon dioxide and copper fume are

11. TOXICOLOGICAL INFORMATION

Acute toxicity	No information
Skin corrosion/irritation	No information
Eye damage/irritation	No information
Respiratory sensitization	No information
Skin sensitization	(Ag) There is a of allergic reaction by contact to accessories containing silver.
Germ cell mutagenicity	No information
Carcinogenicity	No information
Reproductive toxicity	No information
Specific target organ toxicity (single exposure)	(Ag) The obstacle of the respiratory system
Specific target organ toxicity (repeated exposure)	(Sn) fear of the obstacle to the lungs (Ag) Damage of Eyes and respiratory organs with long term or the repetition exposure (Category 1)
Aspiration hazard	No information
Hazardous to the aquatic environment-Acute hazard	No information
Hazardous to the aquatic environment-Chronic	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 18-2 137 Silver and its water soluble compounds Enforcement order Article 18-2 379 Copper and its compounds
PRTR Law	Class I Designated Chemical Substance Cabinet Order No 82 Silver and its water soluble compounds
Other Regulations	Sewerage Act Enforcement Act Article 9-4 Copper 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.