SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION Product Name CLEAN SOLDER SOLDER BAR NP303

Company Identification Name of Supplier NIHON GENMA MFG. CO., LTD. Address of Supplier 2-16-4, Mitsuyakita, Yodogawa-Ku, Osaka, Japan Department in charge Technical department Person in charge Junichi Takenaka Emergency Telephone 06-6302-1251 06-6302-1250 Fax No. Mail address ingm006@k7.dion.ne.jp SDS No. SDS- E021270 Recommended and restrictions of Soldering process use of the products

2. HAZARD IDENTIFICATION

GHS Classification

<physical hazards=""></physical>		<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	Not Applicable	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	Classification Not Possible
Self-heating substances and mixtures	Not Applicable	Carcinogenicity	Not Classified
Substances and mixtures which, in contact with water, emit flammable	Not Applicable	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	Not Applicable	<environmental haza<="" td=""><td>irds></td></environmental>	irds>
		Hazardous to the aquatic	Classification

Hazardous to the aquaticClassificationenvironment-Acute hazardNot PossibleHazardous to the aquaticNotenvironment-Chronic hazardClassified

Label Eleme Symbols/	nts Pictograms
Signal Wo	rd Danger
Hazardous Ir	nformation
	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 I	Mixture	Mixture(alloy)		
Chemical name or Ge	neral name	Solder bar		
Composition				
Material name	Chemical formula	CAS No	Official file number	Content wt%
Tin	Sn	7440-31-5	-	96.5
Silver	Ag	7440-22-4	-	3.0
Copper	Cu	7440-50-8	-	0.50

4. FIRST-AID MEASURES

Eye contactFlush eye well with plenty running water for 15 minutes, including under eyelids.
See physician.Skin contactWash with plenty of soap and water.
Remove to fresh air and call physician.IngestionSpit 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 sk wash the hand with alcohol or water with soap.	
	Wear protection glass	s and mask in operation.	
Instructions	Ventilate the room s	Ventilate the room sufficiently in operation. Take care not to inhale the vapor.	
Storage	Keep in the cool and	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	e equipment In operation, perform local	
Exposure limit	Unit mg/m^3	
	OSHA PEL	ACGIH TWA
	2009	2009
Tin	2	2
Silver	0.01	0.1
Copper	0.1	0.2

Personal pro

Respiratory apparatus	Protective mask
Hand	Protective gloves
Eye	Protective glass

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Gray metal bar		
Melting Point (METAL)	217–219 °C	Percent Volatile	No
Combustibility	No	Specific gravity	7.4
Solubility to water	No	Ignition point	No
Flash point	No	(main solvent)	
Flash (spontaneous combustion, reaction with	No	Oxidization	No
water)		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 hume are generated.
decomposition	
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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	(Sn) fear of the obstacle to the lungs
toxicity (repeated exposure)	(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	Enforcement order Article 18-2 322 Tin and its compounds
health law	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.