SAFETY DATA SHEET

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION Product Name CLEAN SOLDER SOLDER ACE YS-RMA NP303

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 depatment Person in charge Junichi Takenaka Emergency Telephone 06-6302-1251 Fax No. 06-6302-1250 ingm006@k7.dion.ne.jp Mail address SDS No. SDS- E030654 Recommended and restrictions of Soldering process use of the products

2. HAZARD IDENTIFICATION

GHS Classification

<physical hazards=""></physical>	>	<health hazards<="" th=""><th>></th></health>	>
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]	Not Classified
Gases under pressure	Not Applicable	Acute toxicity [inhalation:dust and mist]	Not Classified
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	Not Classified
Pyrophoric liquids	Not Applicable	Skin seneitization	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 gases	t Classification Not Possible	Reproductive toxicity	Not Classified
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 haz<="" td=""><td>ards></td></environmental>	ards>
		Hazardous to the aquatic	Not

Hazardous to the aquatic

environment-Acute hazard	Classified
Hazardous to the aquatic	Not
environment-Chronic hazard	Classified

Label Elements



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/	/vapours/spray. (P260)
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- •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)
- ·Contaminated work clothing should not be allowed out of the workplace. (P272)
- •Wear protective gloves/protective clothing/eye protection/face protection. (P280)
- Reponse 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 lin 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	-	93
Silver	Ag	7440-22-4	-	2.9
Copper	Cu	7440-50-8	-	0.48
Rosin	-	trade secret	-	2.6
Miscellaneous	-	-	-	1.02

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 neccessary afterwards.

5. FIRE-FIGHTING MEASURES

Extinguishant Specific fire fighting method	Dry chemical, airfoam, carbon dioxide. 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	Stand in the windward, wear tools for protection for breathing and do not inhale
fighters	outbreak gas.

6. ACCIDENTAL RELEAS Attention for the human body	SE MEASURES 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 STOP	RAGE
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.InstructionsVentilate the room sufficiently in operation. Take care not to inhale the vapor.StorageKeep in the cool and dark space.
Condition to avoidKeep Away from heat source, ignition, strong oxidizers,

alkaline and acid.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Protective equipment Exposure limit	local exhaust in operation Unit mg/m^3	
	OSHA PEL	ACGIH TWA
	2009	2009
Tin	-	2
Silver	0.01	0.1
Copper	0.1	0.2
Rosin	-	-

Personal protective equipment

Respiratory apparatus	Protective mask
Hand	Protective gloves
Eye	Protective glass

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Melting Point (METAL	Gray metal wire) 217-219 °C	Percent Volatile	No
Combustibility Solubility to water Flash point	Include inflammables No No information	Specific gravity Ignition point (main solvent)	6.1 No
Flash (spontaneous combustion, reaction with water)	No	Oxidization Boiling point	No information 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 products	

11. TOXICOLOGICAL INFORMATION

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	Acute toxicity	No information
	Skin corrosion/irritation	No information
	Eye damage/irritation	No information
	Respiratory sensitization	No information
	Skin seneitization	(Ag) There is an allergic reaction by contact.
	Germ cell mutagenicity	No information
	Carcinogenicity	No information
	Reproductive toxicity	No information
	Specific target organ toxicity(single	(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 $% \left(A_{1}^{2}\right) =0$
	Aspiration hazard	No information
	Hazardous to the aquatic environment-Acute hazard	No information
	Hazardaya ta tha aquatia	No. in Commention

Hazardous to the aquatic No information environment-Chronic

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 ingredints are recyclable.

14. TRANSPORT INFORMATION

UN No. Not Applicable Marine polutant 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
	•Enforcement order Article 18-2 632 Rosin
PRTR Law	•Class I Designated Chemical Substance Cabinet Order No 82 Silver and its water soluble compounds 2.9%

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.