

Version	Revision Date:	SDS Number:	Date of last issue: 12/06/2019
3.0	06/06/2023	102000023148	Date of first issue: 03/21/2018

SECTION 1. IDENTIFICATION

Product name	:	STANDART RESIST ROTOFLEX Brillant Rich Gold Bronze Powder
Product code	:	069543BP0
Manufacturer or supplier's o	deta	ils
Company name of supplier	:	ECKART America Corporation
Address	:	830 East Erie Street
		Painesville OH 44077
Telephone	:	866-458-7837
		(440) 954-7600
Telefax	:	(440) 354-6224
e-mail adresse	:	info.eckart.america.oh@altana.com
Emergency telephone	:	CHEMTREC: 800-424-9300
		CHEMTREC: 1-703-527-3387 (International)
		NCEC:
		(contract no. ECKART29003-NCEC)
		US: +1 866 928 0789 (Toll free)
		Canada: +1 800 579 7421 (Toll Free)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) Combustible dust				
Acute toxicity (Oral)	: Category 4			
Eye irritation	: Category 2A			
GHS label elements Hazard pictograms				

Mexico: +52 55 5004 8763

Signal Word	:	Warning
Hazard Statements	:	May form combustible dust concentrations in air. H302 Harmful if swallowed.



STANDART RESIST ROTOFLEX Brillant Rich Gold Bronze Powder

Version 3.0	Revision Date: 06/06/2023	SDS Number: 102000023148	Date of last issue: 12/06/2019 Date of first issue: 03/21/2018
		H319 Causes	serious eye irritation.
Preca	utionary Statements	· Prevention:	
		P264	Wash skin thoroughly after handling.
		P270	Do not eat, drink or smoke when using this
		D 000	product.
		P280	Wear eye protection/ face protection.
		Response:	
		P301 + P312 -	+ P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
		P305 + P351 -	
		P337 + P313	If eye irritation persists: Get medical advice/ attention.
		Disposal:	
		P501	Dispose of contents/ container to an approved waste disposal plant.

Hazardous ingredients which must be listed on the label: Copper

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
Copper	7440-50-8	>= 50 - < 70
Zinc	7440-66-6	>= 20 - < 30
Silica	7631-86-9	>= 1 - < 5

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice	: Take the victim into fresh air.
	Move out of dangerous area.
	Show this material safety data sheet to the doctor in
	attendance.





STANDART RESIST ROTOFLEX Brillant Rich Gold Bronze Powder

Version 3.0	Revision Date: 06/06/2023	SDS Number: 102000023148	Date of last issue: 12/06/2019 Date of first issue: 03/21/2018		
lf inha	aled	advice.	, place in recovery position and seek medical		
In case of skin contact In case of eye contact		: Wash off immediately flucture contains and the second se	 If symptoms persist, call a physician. Wash off immediately with soap and plenty of water. Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. 		
If swallowed		Do not give mi Never give any	 Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. 		
	important symptoms ffects, both acute and ed	: Harmful if swa Causes seriou	lowed.		

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Special powder against metal fire Dry sand ABC powder
Unsuitable extinguishing media	:	Water High volume water jet Carbon dioxide (CO2)
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Further information	:	Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Evacuate personnel to safe areas. Use personal protective equipment. Avoid dust formation. Avoid breathing dust.
Environmental precautions	:	The product should not be allowed to enter drains, water courses or the soil.



STANDART RESIST ROTOFLEX Brillant Rich Gold Bronze Powder

ersion .0	Revision Date: 06/06/2023	SDS Number: 102000023148	Date of last issue: 12/06/2019 Date of first issue: 03/21/2018		
		Prevent fur	oduct from entering drains. ther leakage or spillage if safe to do so. Ict contaminates rivers and lakes or drains inform authorities.		
	ods and materials for inment and cleaning up	: Use mecha	: Use mechanical handling equipment.		
		Pick up and	I transfer to properly labeled containers.		
		Keep in sui	table, closed containers for disposal.		
ECTION	7. HANDLING AND ST	ORAGE			
	e on protection against nd explosion	: Normal me	asures for preventive fire protection.		
		Avoid dust	formation.		
Advic	e on safe handling	dusts do no Avoid form Do not brea Avoid cont For person Smoking, e application	usekeeping should be instituted to ensure that ot accumulate on surfaces. ation of respirable particles. athe vapors/dust. act with skin and eyes. al protection see section 8. ating and drinking should be prohibited in the area. rinse water in accordance with local and national		
Condi	itions for safe storage	 Electrical installations / working materials must comply with the technological safety standards. Keep away from sources of ignition - No smoking. Do not store near combustible materials. Keep containers tightly closed in a cool, well-ventilated place. To maintain product quality, do not store in heat or direct sunlight. Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with 			
		Keep conta To maintair sunlight. Keep conta place. Electrical ir	iners tightly closed in a cool, well-ventilated place. product quality, do not store in heat or direct iner tightly closed in a dry and well-ventilated		



Version	Revision Date:	SDS Number:	Date of last issue: 12/06/2019
3.0	06/06/2023	102000023148	Date of first issue: 03/21/2018

strongly acid materials in order to avoid exothermic reactions. Do not store together with oxidizing and self-igniting products.

Further information on : Keep in a dry place. storage stability

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Copper	7440-50-8	TWA	1 mg/m3 (Copper)	ACGIH
		TWA (dust and mists)	1 mg/m3 (Copper)	NIOSH REL
		TWA	1 mg/m3 (Copper)	OSHA P0
		TWA	0.2 mg/m3 (Copper)	ACGIH
		TWA	0.1 mg/m3 (Copper)	OSHA P0
		TWA (Dust and mist)	1 mg/m3 (Copper)	ACGIH
		TWA (Fumes)	0.2 mg/m3 (Copper)	ACGIH
		TWA (Dust)	1 mg/m3 (Copper)	NIOSH REL
		TWA (Mist)	1 mg/m3 (Copper)	NIOSH REL
		TWA (dusts and mists)	1 mg/m3 (Copper)	OSHA Z-1
		TWA (Fumes)	0.1 mg/m3 (Copper)	OSHA Z-1
		TWA (Fumes)	0.1 mg/m3 (Copper)	OSHA P0
		TWA (Dust and mist)	1 mg/m3 (Copper)	OSHA P0
Zinc	7440-66-6	TWA (total dust)	50 Million particles per cubic foot	OSHA Z-3
		TWA (total dust)	15 mg/m3	OSHA Z-3



Version	Revision Date:	SDS Number:	Date of last issue: 12/06/2019
3.0	06/06/2023	102000023148	Date of first issue: 03/21/2018

		TWA (respirable fraction)	5 mg/m3	OSHA Z-3
		TWA (respirable fraction)	15 Million particles per cubic foot	OSHA Z-3
Silica	7631-86-9	TWA (Dust)	20 Million particles per cubic foot (Silica)	OSHA Z-3
		TWA (Dust)	80 mg/m3 / %SiO2 (Silica)	OSHA Z-3
		TWA	6 mg/m3 (Silica)	NIOSH REL

Personal protective equipment					
Respiratory protection	 Use suitable breathing protection if workplace concentration requires. Respirator with a dust filter P1 filter 				
Hand protection Material	: Leather				
Remarks	: Leather gloves The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The exact break through time can be obtained from the protective glove producer and this has to be observed. Recommended preventive skin protection The suitability for a specific workplace should be discussed with the producers of the protective gloves.				
Eye protection	 Safety glasses Wear face-shield and protective suit for abnormal processing problems. 				
Skin and body protection	 Long sleeved clothing Safety shoes Dust impervious protective suit Choose body protection according to the amount and 				
Hygiene measures	 concentration of the dangerous substance at the work place. General industrial hygiene practice. Do not smoke. Wash hands before breaks and at the end of workday. 				





Version 3.0	Revision Date: 06/06/2023		Number: 0023148	Date of last issue: 12/06/2019 Date of first issue: 03/21/2018
		Ke W W	hen using do no hen using do no	obacco products. it eat or drink.
SECTIC	N 9. PHYSICAL AND CHE			6
Col Od PH Me Initi ran Fla Eva	or or Threshold Iting point/freezing point ial boiling point and boiling	: g : o : N : s : > : N : N : N : C	owder old dorless o data available ubstance/mixtur 900 °C o data available o data available o data available ombustible Soli	e is non-soluble (in water)
Bu	ning number	: 1		
flar Lov flar Vap Rel Del Sol Sol Par oct Aut	per explosion limit / Upper nmability limit wer explosion limit / Lower nmability limit oor pressure ative density nsity k density lubility(ies) Water solubility tition coefficient: n- anol/water coignition temperature composition temperature cosity ticle Size Distribution	: N : N : 8 : c : in : N : N : N : N	o data available o data available o data available o data available o data available - 9 g/cm3 a. 0.55 g/cm3 soluble o data available o data available o data available 50 = 7 μ m ± 2 μ	

SECTION 10. STABILITY AND REACTIVITY



Versio 3.0	n Revision Date: 06/06/2023	SDS Number:Date of last issue: 12/06/2019102000023148Date of first issue: 03/21/2018	
C P	eactivity hemical stability ossibility of hazardous eactions	 No decomposition if stored and applied as directed. No decomposition if stored and applied as directed. Stable under recommended storage conditions. No hazards to be specially mentioned. No decomposition if stored and applied as directed. Dust may form explosive mixture in air. 	
С	conditions to avoid	: No data available	
SECT	ION 11. TOXICOLOGICAL	IFORMATION	
	cute toxicity larmful if swallowed.		
<u>c</u>	components:		
	copper: cute oral toxicity	: Assessment: The component/mixture is moderately toxic after single ingestion.	er
z	inc:		
A	cute oral toxicity	: (Rat): > 2,000 mg/kg	
A	cute inhalation toxicity	: LC50 (Rat): 5.41 mg/l Exposure time: 4 h Test atmosphere: dust/mist	
S	ilica:		
A	cute oral toxicity	: LD50 (Rat): > 5,000 mg/kg	
		(Mouse): 15,000 mg/kg	
A	cute inhalation toxicity	: (Rat): 0.139 mg/l Exposure time: 4 h	
А	cute dermal toxicity	: LD50 (Rabbit): > 5,000 mg/kg	
-	kin corrosion/irritation	le information.	
<u>C</u>	components:		
	copper: emarks: May cause skin irrit	tion in susceptible persons.	



Version 3.0 Revision Date: 06/06/2023

SDS Number: 102000023148

Date of last issue: 12/06/2019 Date of first issue: 03/21/2018

Serious eye damage/eye irritation

Causes serious eye irritation.

Components:

Copper:

Result: Eye irritation

Respiratory or skin sensitization

Skin sensitization

Not classified based on available information.

Respiratory sensitization

Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.



Version	Revision Da
3.0	06/06/2023

sion Date: 5/2023 SDS Number: 102000023148 Date of last issue: 12/06/2019 Date of first issue: 03/21/2018

Further information

Components:

Copper: Remarks: No data available

Zinc:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Com	ponents:

Copper: M-Factor (Acute aquatic	:	10
toxicity) M-Factor (Chronic aquatic toxicity)	:	10
Ecotoxicology Assessment		
Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.
Zinc:		
Ecotoxicology Assessment		
Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.
Silica:		
Toxicity to daphnia and other	:	(Daphnia): 7,600 mg/l
aquatic invertebrates Toxicity to algae	:	(Chlorella pyrenoidosa): 440 mg/l

Persistence and degradability

No data available

Bioaccumulative potential

No data available



Version 3.0	Revision Date: 06/06/2023	SDS Number: 102000023148	Date of last issue: 12/06/2019 Date of first issue: 03/21/2018
Othe	r adverse effects		
No d	ata available		
Com	ponents:		
Сорр	ber:		
	tional ecological nation	unprofessi	mental hazard cannot be excluded in the event of onal handling or disposal. to aquatic life with long lasting effects.
Zinc:			
	tional ecological mation	unprofessi	mental hazard cannot be excluded in the event of onal handling or disposal. to aquatic life with long lasting effects.
Silica	a:		
	tional ecological mation	: No data av	ailable
SECTION	13. DISPOSAL COM	SIDERATIONS	
Disp	osal methods		
Wast	e from residues	· The produ	ct should not be allowed to enter drains, water

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil.
		Do not contaminate ponds, waterways or ditches with chemical or used container.
		Send to a licensed waste management company.
		In accordance with local and national regulations.
Contaminated packaging	:	Empty remaining contents.
		Dispose of as unused product.
		Do not re-use empty containers.
		In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation			
49 CFR Not regulated as a dangerous	s go	od	
International Regulations			
IATA-DGR			
UN/ID No.	:	UN 3077	
Proper shipping name	:	Environmentally hazardous substance,	solid, n.o.s.
		11 / 16	



Version	Revision Date:	SDS Number:	Date of last issue: 12/06/2019
3.0	06/06/2023	102000023148	Date of first issue: 03/21/2018
		(Copper metal	powder)

Class	:	9		
Packing group	:	III		
Labels	:	Miscellaneous		
Packing instruction (cargo aircraft)	:	956		
Packing instruction (passenger aircraft)	:	956		
IMDG-Code				
UN number	:	UN 3077		
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Copper metal powder)		
Class	:	9		
Packing group	:			
Labels	:	9		
Marine pollutant	:	Ves		
Remarks	:	IMDG Code segregation group 7 - Heavy metals and their salts		
Remarks	:	For single packagings <=5L / 5 kg, or combination packagings containing inner packagings <= 5L / 5 kg net per inner packaging, SV375 ADR, 2.10.2.7 IMDG-Code, A197 IATA-DGR may be applied.		
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code				

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ
		(lbs)
Zinc	7440-66-6	1000

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards

: Combustible dust Acute toxicity (any route of exposure)



Version 3.0	Revision Date: 06/06/2023	SDS Number: 102000023148	Date of last issue: 12/0 Date of first issue: 03/2	•
		Serious eye da	amage or eye irritation	
SARA 313		9	components are subject to r SARA Title III, Section 313	
		Copper	7440-50-8	>= 50 - < 70 %
		Zinc	7440-66-6	>= 20 - < 30 %
Clean	Air Act			
•		ns, nor was manufactu 602 (40 CFR 82, Subr	red with a Class I or Class ot. A, App.A + B).	II ODS as defined by the

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product contains the following	g toxic pollutants listed	under the U.S. Clean Water Act Section 307
Copper	7440-50-8	66.375 %

Zinc	7440-66-6	28.4464 %

This product contains the following priority pollutants related to the U.S. Clean Water Act: Copper 7440-50-8 66.375 %

Zinc	7440-66-6	28.4464 %

US State Regulations

Massachusetts Right To Know			
Copper	7440-50-8		
Zinc	7440-66-6		
Silica	7631-86-9		

Pennsylvania Right To Know



3.0 06/06/2023 102000023148 Date of first issue: 03/21/2018	Version 3.0	Revision Date: 06/06/2023	SDS Number: 102000023148	Date of last issue: 12/06/2019 Date of first issue: 03/21/2018	
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Copper	7440-50-8
Zinc	7440-66-6
Silica	7631-86-9
Aluminum	7429-90-5

California Prop. 65



WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

Copper	7440-50-8
Zinc	7440-66-6
Silica	7631-86-9

California Permissible Exposure Limits for Chemical Contaminants

Copper	7440-50-8
Zinc	7440-66-6
Silica	7631-86-9

The ingredients of this product are reported in the following inventories:DSL:All components of this product are on the Canadian DSLTSCA:All substances listed as active on the TSCA inventory

TSCA list

No substances are subject to a Significant New Use Rule.

The following substance(s) is/are subject to TSCA 12(b) export notification requirements: Zinc 7440-66-6



STANDART RESIST ROTOFLEX Brillant Rich Gold Bronze Powder

Version	R
3.0	0

Revision Date: 6/06/2023 SDS Number: 102000023148

Date of last issue: 12/06/2019 Date of first issue: 03/21/2018

SECTION 16. OTHER INFORMATION

Full text of other abbreviations				
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)		
NIOSH REL	:	USA. NIOSH Recommended Exposure Limits		
OSHA PO	:	USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values)		
OSHA Z-1	:	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants		
OSHA Z-3	:	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts		
ACGIH / TWA	:	8-hour, time-weighted average		
NIOSH REL / TWA	:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek		
OSHA P0 / TWA	:	8-hour time weighted average		
OSHA Z-1 / TWA	:	8-hour time weighted average		
OSHA Z-3 / TWA	:	8-hour time weighted average		

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials: bw - Body weight: CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances: (Q)SAR - (Quantitative) Structure Activity Relationship: RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet;



STANDART RESIST ROTOFLEX Brillant Rich Gold Bronze Powder

Version	Revision Date:	SDS Number:
3.0	06/06/2023	102000023148

Date of last issue: 12/06/2019 Date of first issue: 03/21/2018

TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 06/06/2023

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

US / Z8