



Version	Revision Date:	SDS Number:	Date of last issue: 03/21/2018
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SECTION 1. IDENTIFICATION

Product name Product code	:	STANDART RESIST CT Copper Powder 069501C20
Manufacturer or supplier's	deta	ils
Company name of supplier	:	ECKART America Corporation
Address	:	830 East Erie Street
		Painesville OH 44077
Telephone	:	866-458-7837
Telefax	:	(440) 354-6224
Emergency telephone	:	CHEMTREC: 800-424-9300
		CHEMTREC: 1-703-527-3387 (International)
		NCEC:
		(contract no. ECKAPT20003-NCEC)

(contract no. ECKART29003-NCEC) US: +1 866 928 0789 (Toll free) Canada: +1 800 579 7421 (Toll Free) Mexico: +52 55 5004 8763

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accor Combustible dust	rdan	ce with 29 CFR	1910.1200
Acute toxicity (Oral)	:	Category 4	
Eye irritation	:	Category 2A	
GHS label elements Hazard pictograms	:	<u>(!</u>)	
Signal Word	:	Warning	
Hazard Statements	:	H302 Harmful if	ustible dust concentrations in air. swallowed. erious eye irritation.
Precautionary Statements	:	Prevention: P264 P270	Wash skin thoroughly after handling. Do not eat, drink or smoke when using this





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		P280	product. Wear eye protection/ face protection.
		Response: P301 + P312 + I	P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
		P305 + P351 + I	P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		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	>= 90 - < 100
Silica	7631-86-9	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice	 Take the victim into fresh air. Do not leave the victim unattended. Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.
lf inhaled	 If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water.
In case of eye contact	 Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.



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lf swa	llowed	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.				
Most important symptoms and effects, both acute and delayed		: Harmful if swallowed. Causes serious eye irritation.				
ECTION	5. FIRE-FIGHTING ME	SURES				
Suitat	ble extinguishing media	: Special powder against metal fire Dry sand ABC powder				
	table extinguishing	: Water				
media Speci fightir	fic hazards during fire	 High volume water jet Do not allow run-off from fire fighting to enter drains or water courses. 				
Further information		 Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. 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. 				
	al protective equipment e-fighters	Wear self-contained breathing apparatus for firefighting if necessary.				
SECTION	6. ACCIDENTAL RELE	ASE MEASURES				
protec	nal precautions, ctive equipment and gency procedures	 Use personal protective equipment. Evacuate personnel to safe areas. Use personal protective equipment. Avoid dust formation. Avoid breathing dust. 				
Enviro	onmental precautions	:				
		Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.				
Methods and materials for : Use mechanical handling equipment. containment and cleaning up		: Use mechanical handling equipment.				







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		Pick up and transfer to properly labeled containers.		
		Keep in suita	ble, closed containers for disposal.	
SECTION	7. HANDLING AND ST	ORAGE		
	ce on protection against nd explosion	: Normal meas	sures for preventive fire protection.	
		Avoid dust fo	ormation.	
	ce on safe handling litions for safe storage	dusts do not Avoid format Do not breath Avoid contac For personal Smoking, eat application a Dispose of ri regulations. Electrical ins the technolog	sekeeping should be instituted to ensure that accumulate on surfaces. ion of respirable particles. ne vapors/dust. st with skin and eyes. protection see section 8. ting and drinking should be prohibited in the rea. nse water in accordance with local and national tallations / working materials must comply with gical safety standards.	
		Do not store Keep contain To maintain p sunlight. Keep contain place. Electrical ins	rom sources of ignition - No smoking. near combustible materials. hers tightly closed in a cool, well-ventilated place. broduct quality, do not store in heat or direct her tightly closed in a dry and well-ventilated tallations / working materials must comply with gical safety standards.	
	ures/Precautions	: Protect from	humidity and water.	
Mater	rials to avoid	strongly acid	rom oxidizing agents, strongly alkaline and materials in order to avoid exothermic reactions. together with oxidizing and self-igniting products.	
	er information on ge stability	: Keep in a dry	: Keep in a dry place.	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters





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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
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





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M	aterial	: Leather			
Re	emarks	: 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.			
Еуе р	protection	: Safety glasses	: Safety glasses Wear face-shield and protective suit for abnormal processing		
Skin	and body protection	: Long sleeved of Safety shoes Dust imperviou Choose body p	: Long sleeved clothing		
Hygie	ene measures	: General indust Do not smoke. Wash hands b Keep away fro Keep away fro When using do When using do	 General industrial hygiene practice. Do not smoke. Wash hands before breaks and at the end of workday. Keep away from food and drink. Keep away from tobacco products. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday. 		

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Color Odor Odor Threshold pH Melting point/freezing point Boiling point/boiling range	::	powder copper odorless No data available No data available No data available 2,597 °C
Flash point Evaporation rate Flammability (solid, gas)	: :	No data available No data available Combustible Solids combustible dust
Upper explosion limit / Upper	:	No data available







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	nability limit			
	r explosion limit / Lower nability limit	:	No data available	3
	or pressure	:	No data available	9
	ive density	:	No data available	9
Dens		:	ca. 8.7 g/cm3	
Solut	oility(ies)			
	ater solubility	:	immiscible	
	ion coefficient: n- nol/water	:	No data available	9
Autoi	Autoignition temperature		No data available	
	Decomposition temperature		No data available	
Visco		:	No data available	9
SECTION	10. STABILITY AND RI	EAC	ΓΙVITY	
Reac	tivity	:		on if stored and applied as directed. on if stored and applied as directed.
Cherr	nical stability	:		on if stored and applied as directed.
	ibility of hazardous	:	Stable under rece No hazards to be No decomposition	ommended storage conditions. e specially mentioned. on if stored and applied as directed. xplosive mixture in air.

|--|

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity Harmful if swallowed.		
Components:		
Copper: Acute oral toxicity	:	Assessment: The component/mixture is moderately toxic after single ingestion.
Silica: Acute oral toxicity	:	LD50 (Rat): 5,000 mg/kg (Mouse): 15,000 mg/kg
Acute inhalation toxicity	:	(Rat): 0.139 mg/l Exposure time: 4 h





ermal toxicity rrosion/irritation sified based on avail <u>nents:</u> s: May cause skin irr eye damage/eye ir serious eye irritation	itation in susceptible	
sified based on avail nents: s: May cause skin irr eye damage/eye ir	itation in susceptible	⇒persons.
s: May cause skin irr eye damage/eye ir		ersons.
s: May cause skin irr eye damage/eye ir		ersons.
	ritation	
<u>nents:</u>		
Eye irritation		
-	zation	
	lable information.	
•	lable information.	
	lable information.	
	lable information.	
	equal to 0.1% is	this product present at levels greater than or identified as probable, possible or confirmed en by IARC.
		f this product present at levels greater than on on OSHA's list of regulated carcinogens.
		this product present at levels greater than or identified as a known or anticipated carcinog
	Eye irritation tory or skin sensiti nsitization sified based on avai tory sensitization sified based on avai ell mutagenicity sified based on avai genicity sified based on avai	Eye irritation tory or skin sensitization isified based on available information. tory sensitization sified based on available information. ell mutagenicity sified based on available information. genicity sified based on available information. No ingredient of equal to 0.1% is human carcinoge No component of equal to 0.1% is No ingredient of equal to 0.1% is by NTP.







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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.

Further information

Components:

Copper: Remarks: No data available

Silica:

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity						
Components:						
Copper:						
M-Factor (Acute 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.				
Silica:						
Toxicity to daphnia and other aquatic invertebrates	:	(Daphnia): 7,600 mg/l				
Toxicity to algae	:	(Chlorella pyrenoidosa): 440 mg/l				
Persistence and degradabili	ty					
No data available						
Bioaccumulative potential						
No data available						





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••.	adverse effects ta available			
<u>Comp</u>	onents:			
Copp Additi inform	onal ecological	un	professional	al hazard cannot be excluded in the event of handling or disposal. uatic life with long lasting effects.
Silica Additi inform	onal ecological	: No	o data availab	le
CTION	13. DISPOSAL CONS	IDERATI	ONS	
Dispo	sal methods			
Waste	e from residues	co Do ch Se In : En Di Do	urses or the sonot contami emical or use and to a licens accordance whether the sonot contained pty remaining spose of as use on tre-use est	nate ponds, waterways or ditches with d container. sed waste management company. vith local and national regulations. g contents. nused product. mpty containers.
Waste Conta	e from residues minated packaging	co Dc ch Se In : En Dis Dc In	urses or the son to contami emical or use and to a licens accordance whether the solution on the spose of as used to not re-use end accordance whether the solution of the sol	soil. nate ponds, waterways or ditches with d container. sed waste management company. vith local and national regulations. g contents. nused product.
Waste Conta	e from residues	co Dc ch Se In : En Dis Dc In	urses or the son to contami emical or use and to a licens accordance whether the solution on the spose of as used to the solution on the solution of the solut	soil. nate ponds, waterways or ditches with d container. sed waste management company. vith local and national regulations. g contents. nused product. mpty containers.
Waste Conta	e from residues minated packaging	co Dc ch Se In : En Dis Dc In	urses or the son to contami emical or use and to a licens accordance whether the solution on the spose of as used to the solution on the solution of the solut	soil. nate ponds, waterways or ditches with d container. sed waste management company. vith local and national regulations. g contents. nused product. mpty containers.
Conta Conta CTION Dome 49 CF	e from residues minated packaging 14. TRANSPORT INF estic regulation	co Dc ch Se In C Dc In ORMATIO	urses or the son to contami emical or use and to a licens accordance whether the solution on the spose of as used to the solution on the solution of the solut	soil. nate ponds, waterways or ditches with d container. sed waste management company. vith local and national regulations. g contents. nused product. mpty containers.

IATA-DGR

UN/ID No.	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (Copper metal powder)
Class	:	9
Packing group	:	
Labels	:	Class 9 - Miscellaneous dangerous substances and articles
Packing instruction (cargo aircraft)	:	956
Packing instruction	:	956





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(pas	senger aircraft)		
IMD	G-Code		
UN r	number	: UN 3077	
Prop	per shipping name	: ENVIRONMEN N.O.S. (Copper metal	TALLY HAZARDOUS SUBSTANCE, SOLID,
Class		: 9	·
Pack	king group	: III	
Labe		: 9	
	S Code	: F-A, S-F	
	ne pollutant	: yes	
Rem	arks	: IMDG Code se salts	gregation group 7 - Heavy metals and their
Rem	arks	packagings co	kagings <=5L / 5 kg, or combination ntaining inner packagings <= 5L / 5 kg net per g, SV375 ADR, 2.10.2.7 IMDG-Code, A197 ay be applied.

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)
Copper	7440-50-8	5000

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 o Serious eye damage or ey	• •	
SARA 313	: The following components are subject established by SARA Title III, Section		•	
		Copper	7440-50-8	>= 90 - <= 100 %



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Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

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 toxic pollutants listed under the U.S. Clean Water Act Section 307 Copper 7440-50-8 95.1069 %

US State Regulations

Massachusetts Right To Know				
	Соррег	7440-50-8		
	Silica	7631-86-9		
Pennsylvania Right To Know				
	Copper	7440-50-8		
	Silica	7631-86-9		

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.



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
Silica	7631-86-9





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Califo	ornia Permissible Ex	posure Limits for Ch	emical Contaminants
	Copper		7440-50-8
	Silica		7631-86-9
The in	ngredients of this p	roduct are reported ir	the following inventories:
DSL TSCA	۱.	All components of this product are on the Canadian DSLOn TSCA Inventory	
TSCA	A list		
No su	ubstances are subject	to a Significant New U	se Rule.
No su	ubstances are subject	to TSCA 12(b) export	notification requirements.

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. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000				
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				

AICS - Australian Inventory of Chemical Substances; 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



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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; TCSI - Taiwan Chemical Substance 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

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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.

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