COPPER

Version Number 1.1 Revision Date 02/26/2019

Ine

Page 1 of 14 Print Date 06/04/2019

SAFETY DATA SHEET

COPPER

Section 1. Identification			
GHS product identifier Chemical name CAS number Other means of identification Product type	:	COPPER Mixture Mixture CC10250354 liquid	
Relevant identified uses of the substance or mixture and uses advised againstProduct use:Industrial applications. Plastics.			
Supplier's details	:	POLYONE CORPORATION ColorMatrix Group Inc. 680 North Rocky River Drive, Berea, Ohio, 44017-1628, USA	
		+1 216 622 0100	
Emergency telephone number (with hours of operation)	:	CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).	

Section 2. Hazards identification

This mixture has not been evaluated as a whole for health effects. Information provided on health effects of this product is based on the individual components. However, some vapors or contaminants may be released upon heating and the end-user (fabricator) must take the necessary precautions (mechanical ventilation, respiratory protection, etc.) to protect employees from exposure. See sections 8 and 11 for special precautions. After handling, always wash hands thoroughly with soap and water.

OSHA/HCS status	:	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	:	Not classified.

GHS label elements

COPPER

Version Number 1.1 Revision Date 02/26/2019 <u>PolyOne</u>

Page 2 of 14 Print Date 06/04/2019

Signal word	:	No signal word.
Hazard statements	:	No known significant effects or critical hazards.
Precautionary statements		
General	:	Not applicable.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	None known.
Hazards not otherwise classified	:	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Chemical name	:	Mixture
Other means of identification	:	CC10250354

CAS number/other identifiers

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

COPPER

<u>PolyOne</u>

Version Number 1.1 Revision Date 02/26/2019		Page 3 of 14 Print Date 06/04/2019
Ingestion	:	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Most important symptoms/effects, ac	ute a	and delayed
Potential acute health effects		
Eye contact	:	No known significant effects or critical hazards.
Inhalation	:	No known significant effects or critical hazards.
Skin contact	:	No known significant effects or critical hazards.
Ingestion	:	No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Eye contact	:	No specific data.
Inhalation	:	No specific data.
Skin contact	:	No specific data.
Ingestion	:	No specific data.
Indication of immediate medical att	entic	on and special treatment needed, if necessary
Notes to physician	:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	No specific treatment.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media	:	In case of fire, use water spray (fog), foam, dry chemical or $\rm CO_2$. None known.
Specific hazards arising from the chemical Hazardous thermal decomposition products	:	In a fire or if heated, a pressure increase will occur and the container may burst. Decomposition products may include the following materials: carbon dioxide

COPPER



Version Number 1.1 Revision Date 02/26/2019		Page 4 of 14 Print Date 06/04/2019
	carbon monoxide metal oxide/oxides	

Special protective actions for fire- fighters	:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	:	Fire-fighters should wear appropriate protective equipment and self- contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel For emergency responders	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".		
Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).		
Methods and materials for containment and cleaning up				
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.		
Large spill	:	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.		

COPPER

Version Number 1.1 Revision Date 02/26/2019



Page 5 of 14 Print Date 06/04/2019

Section 7. Handling and storage

Precautions for safe handling

Protective measures Advice on general occupational hygiene	:	Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None. **Appropriate engineering controls** Good general ventilation should be sufficient to control worker : exposure to airborne contaminants. **Environmental exposure controls** Emissions from ventilation or work process equipment should be : checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. **Individual protection measures** Wash hands, forearms and face thoroughly after handling chemical **Hygiene measures** : products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

COPPER



Version Number 1.1 Revision Date 02/26/2019		Page 6 of 14 Print Date 06/04/2019
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection		
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products
Body protection	:	if a risk assessment indicates this is necessary. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this
Respiratory protection	:	product. Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state	:	liquid
Color	:	BROWN
Odor	:	Faint odor.
Odor threshold	:	Not available.
рН	:	Not available.
Melting point	:	Not available.
Boiling point	:	Not available.
Flash point	:	Not available.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not available.
Flammability (solid, gas)	:	Not available.
Lower and upper explosive	:	Lower: Not available.
(flammable) limits		Upper: Not available.
Vapor pressure	:	Not available.
Vapor density	:	Not available.
Relative density	:	Not available.
Solubility	:	Not available.

COPPER

<u>PolyOne</u>.

Version Number 1.1 Revision Date 02/26/2019

Page 7 of 14 Print Date 06/04/2019

Solubility in water	:	insoluble in water.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	:	Not available.
Decomposition temperature	:	Not available.
SADT	:	Not available.
Viscosity	:	Dynamic: Not available.
-		Kinematic: Not available.

Section 10. Stability and reactivity

Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	:	Stable under recommended storage and handling conditions (see Section 7).
Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	:	Keep away from extreme heat and oxidizing agents.
Incompatible materials	:	Keep away from strong acids. Oxidizer.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

This mixture has not been evaluated as a whole for health effects. Exposure effects listed are based on existing health data for the individual components which comprise the mixture.

Information on toxicological effects

Sensitization

Acute toxicity		
Conclusion/Summary	:	Mixture.Not fully tested.
Irritation/Corrosion		
Conclusion/Summary		
Skin	:	Mixture.Not fully tested.
Eyes	:	Mixture.Not fully tested.
Respiratory	:	Mixture.Not fully tested.

COPPER

Version Number 1.1 Revision Date 02/26/2019 Page 8 of 14 Print Date 06/04/2019

Conclusion/Summary Skin Respiratory	:	Mixture.Not fully tested. Mixture.Not fully tested.	
<u>Mutagenicity</u>			
Conclusion/Summary	:	Mixture.Not fully tested.	
Carcinogenicity			
Conclusion/Summary	:	Mixture.Not fully tested.	
<u>Reproductive toxicity</u>			
Conclusion/Summary	:	Mixture.Not fully tested.	
<u>Teratogenicity</u>			
Conclusion/Summary	:	Mixture.Not fully tested.	
Specific target organ toxicity (single exposure) Not available.			
<u>Specific target organ toxicity (rep</u> Not available.	eated	exposure)	
	<u>eated</u>	<u>exposure)</u>	
Not available. Aspiration hazard	<u>eated</u>		
Not available. <u>Aspiration hazard</u> Not available. Information on likely routes of			
Not available. <u>Aspiration hazard</u> Not available. <u>Information on likely routes of</u> <u>exposure</u> <u>Potential acute health effects</u> <u>Eye contact</u>		Not available. No known significant effects or critical hazards.	
Not available. <u>Aspiration hazard</u> Not available. <u>Information on likely routes of</u> <u>exposure</u> <u>Potential acute health effects</u> <u>Eye contact</u> <u>Inhalation</u>	:	Not available. No known significant effects or critical hazards. No known significant effects or critical hazards.	
Not available. <u>Aspiration hazard</u> Not available. <u>Information on likely routes of</u> <u>exposure</u> <u>Potential acute health effects</u> <u>Eye contact</u> <u>Inhalation</u> <u>Skin contact</u>	:	Not available. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.	
Not available. <u>Aspiration hazard</u> Not available. <u>Information on likely routes of</u> <u>exposure</u> <u>Potential acute health effects</u> <u>Eye contact</u> <u>Inhalation</u>	:	Not available. No known significant effects or critical hazards. No known significant effects or critical hazards.	
Not available. <u>Aspiration hazard</u> Not available. <u>Information on likely routes of</u> <u>exposure</u> <u>Potential acute health effects</u> <u>Eye contact</u> <u>Inhalation</u> <u>Skin contact</u> <u>Ingestion</u>	:	Not available. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.	
Not available. <u>Aspiration hazard</u> Not available. Information on likely routes of exposure <u>Potential acute health effects</u> Eye contact Inhalation Skin contact Ingestion <u>Symptoms related to the physical,</u>	:	Not available. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.	
Not available. <u>Aspiration hazard</u> Not available. <u>Information on likely routes of</u> <u>exposure</u> <u>Potential acute health effects</u> <u>Eye contact</u> <u>Inhalation</u> <u>Skin contact</u> <u>Ingestion</u>	: : : : : :	Not available. No known significant effects or critical hazards. No known significant effects or critical hazards.	
Not available. Aspiration hazard Not available. Information on likely routes of exposure Potential acute health effects Eye contact Inhalation Skin contact Ingestion Symptoms related to the physical, Eye contact	: : : : : : :	Not available. No known significant effects or critical hazards. No known significant effects or critical hazards.	

PolyOne.

COPPER

<u>PolyOne</u>

Version Number 1.1 Revision Date 02/26/2019 Page 9 of 14 Print Date 06/04/2019

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects Potential delayed effects	:	Not available. Not available.
Long term exposure		
Potential immediate effects Potential delayed effects	:	Not available. Not available.
Potential chronic health effects		
Conclusion/Summary	:	Mixture.Not fully tested.
General Carcinogenicity Mutagenicity Teratogenicity Developmental effects Fertility effects	:	No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Conclusion/Summary: Not available.Persistence and degradability: Not available.Conclusion/Summary: Not available.

Bioaccumulative potential

Not available.

COPPER

Version Number 1.1 Revision Date 02/26/2019

<u>PolyOne</u>

Page 10 of 14 Print Date 06/04/2019

Soil/water partition coefficient (KOC) Other adverse effects

: No known significant effects or critical hazards.

Not available.

Section 13. Disposal considerations

:

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Acute hazardous waste "P" List: Not listed

United States - RCRA Toxic hazardous waste "U" List: Not listed

Section 14. Transport information

U.S.DOT 49CFR Ground/Air/Water	:	Not regulated for transportation.
International Air ICAO/IATA	:	Not classified as dangerous goods under transport regulations.
International Water IMO/IMDG	:	Not classified as dangerous goods under transport regulations.

Section 15. Regulatory information

U.S. Federal regulations

: United States - TSCA 12(b) - Chemical export notification: None

10/14

COPPER

Version Numbe	er 1.1
Revision Date	02/26/2019



Page 11 of 14 Print Date 06/04/2019

of the components are listed. United States - TSCA 4(a) - Final Test Rules: Not listed United States - TSCA 4(a) - ITC Priority list: Not listed United States - TSCA 4(a) - Proposed test rules: Not listed United States - TSCA 4(f) - Priority risk review: Not listed United States - TSCA 5(a)2 - Final significant new use rules: Not listed United States - TSCA 5(a)2 - Proposed significant new use rules: Not listed United States - TSCA 5(e) - Substances consent order: Not listed United States - TSCA 6 - Final risk management: Not listed United States - TSCA 6 - Proposed risk management: Not listed United States - TSCA 8(a) - Chemical risk rules: Not listed United States - TSCA 8(a) - Dioxin/Furane precusor: Not listed United States - TSCA 8(a) - Chemical Data Reporting (CDR): Not determined United States - TSCA 8(a) - Preliminary assessment report (PAIR): Not listed United States - TSCA 8(c) - Significant adverse reaction (SAR): Not listed United States - TSCA 8(d) - Health and safety studies: Not listed United States - EPA Clean water act (CWA) section 307 - Priority pollutants: Not listed United States - EPA Clean water act (CWA) section 311 -Hazardous substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Flammable substances: Not listed United States - EPA Clean air act (CAA) section 112 - Accidental release prevention - Toxic substances: Not listed United States - Department of commerce - Precursor chemical: Not listed

Clean Air Act Section 112(b)	:	Not listed
Hazardous Air Pollutants (HAPs)		
Clean Air Act Section 602 Class I	:	Not listed
Substances		
Clean Air Act Section 602 Class II	:	Not listed
Substances		NT - 11 - 1
DEA List I Chemicals (Precursor	:	Not listed
Chemicals)		NL (11 of a 1
DEA List II Chemicals (Essential	:	Not listed
Chemicals)		

US. EPA CERCLA Hazardous Substances (40 CFR 302)

not applicable

COPPER

Version Number 1.1 Revision Date 02/26/2019 Page 12 of 14 Print Date 06/04/2019

SARA 311/312

Classification

: Not applicable.

Composition/information on ingredients

No products were found.

SARA 313

	Product name	CAS number	%
Form R - Reporting	Aluminum	7429-90-5	1 - 3
requirements			
Supplier notification	Aluminum	7429-90-5	1 - 3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

<u>State regulations</u> Massachusetts New York New Jersey	::	None of the components are listed. None of the components are listed. The following components are listed: Aluminum Iron oxide Mica
Pennsylvania	:	The following components are listed: Aluminum
		Iron oxide
		Mica
<u>California Prop. 65</u> This product does not require a Safe H United States investory (TSCA 8b)		
United States inventory (TSCA 8b)	•	All components are listed or exempted.
Canada inventory	:	At least one component is not listed in DSL but all such components are listed in NDSL.
International regulations		
Inventory list		
Australia	:	All components are listed or exempted.
		12/14



COPPER

ŀ	bh	νO	ne.
_			

Version Number 1.1	
Revision Date 02/26/2019	

Page 13 of 14 Print Date 06/04/2019

Canada :	At least one component is not listed in DSL but all such components are listed in NDSL.
China	All components are listed or exempted.
Europe inventory :	All components are listed or exempted.
Japan :	Not determined.
New Zealand	Not determined.
Philippines :	Not determined.
Republic of Korea	All components are listed or exempted.
Taiwan	All components are listed or exempted.
Turkey	Not determined.
United States	All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	/	0
Flammability		0
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual. History

History		
Date of printing	:	06/04/2019
Date of issue/Date of revision	:	02/26/2019
Date of previous issue	:	05/18/2017
Version	:	1.1
Key to abbreviations	:	ATE = Acute Toxicity Estimate
·		BCF = Bioconcentration Factor
		GHS = Globally Harmonized System of Classification and Labelling of
		Chemicals
		IATA = International Air Transport Association
		IBC = Intermediate Bulk Container
		IMDG = International Maritime Dangerous Goods
		LogPow = logarithm of the octanol/water partition coefficient
		MARPOL = International Convention for the Prevention of Pollution From
		Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine
		pollution)

COPPER

Version Number 1.1 Revision Date 02/26/2019 <u>PolyOne</u>

Page 14 of 14 Print Date 06/04/2019

References

UN = United Nations Not available.

:

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Particularly this information may not be valid for such material used in conjunction with any other materials or in any process, unless specified in the text.