

SAFETY DATA SHEET**XGT-42589-0004A-01-1**Version Number 1.1
Revision Date 12/29/2025Page 1 of 17
Print Date 01/02/2026**SAFETY DATA SHEET****XGT-42589-0004A-01-1****Section 1. Identification**

GHS product identifier : XGT-42589-0004A-01-1
Chemical name : Mixture
CAS number : Mixture
Other means of identification : EM10062443
Product type : solid

Relevant identified uses of the substance or mixture and uses advised against

Product use : Industrial applications.

Supplier's details : **AVIENT CORPORATION**
33587 Walker Road, Avon Lake, OH 44012

1 (440) 930-1000 or 1 (844) 4AVIENT

Emergency telephone number (with hours of operation) : CHEMTREC 1-800-424-9300 (24hrs for spill, leak, fire, exposure or accident).

Section 2. Hazards identification

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

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.

Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 2 of 17
 Print Date 01/02/2026

- Disposal** : Not applicable.
- Hazards not otherwise classified** : None known.
- Hazards identified when used** : No known significant effects or critical hazards.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Chemical name** : XGT-42589-0004A-01-1
- Other means of identification** : XGT-42589-0004A-01-1

Ingredient name	Synonyms	%	Identifiers
Copper	Copper (granulated)	>= 80 - 100	CAS: 7440-50-8

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

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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.
- Ingestion** : Wash out mouth with water. 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, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
Revision Date 12/29/2025

Page 3 of 17
Print Date 01/02/2026

- 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 attention 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. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: 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

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
Revision Date 12/29/2025

Page 4 of 17
Print Date 01/02/2026

- For non-emergency personnel** : 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.
- For emergency responders** : 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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Avoid release to the environment.
- Advice on general occupational hygiene** : 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.

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
Revision Date 12/29/2025

Page 5 of 17
Print Date 01/02/2026

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Copper	<p>CAL OSHA PEL (2018-05-16). [copper metal fume as Cu] TWA 8 hours: 0.1 mg/m3 (as Cu)</p> <p>NIOSH REL (2010-09-01). [copper dusts and mists as Cu] TWA 10 hours: 1 mg/m3 (as Cu) Form: Dusts and mists</p> <p>OSHA PEL (1993-06-30). [Copper] TWA 8 hours: 0.1 mg/m3 Form: Fume TWA 8 hours: 1 mg/m3 Form: Dusts and mists</p> <p>NIOSH REL (2010-09-01). [COPPER FUME as Cu] TWA 10 hours: 0.1 mg/m3 (as Cu) Form: Fume</p> <p>OSHA PEL 1989 (1989-03-01). [Copper Fume (as Cu)] TWA 8 hours: 0.1 mg/m3 (as Cu) Form: Fume</p> <p>OSHA PEL 1989 (1989-03-01). [Copper Dust and mists (as Cu)] TWA 8 hours: 1 mg/m3 (as Cu) Form: Dusts and mists</p> <p>ACGIH TLV (1994-09-01). [copper dusts and mists as Cu] TWA 8 hours: 1 mg/m3 (as Cu) Form: Dusts and mists</p> <p>ACGIH TLV (1994-09-01). [copper fume] TWA 8 hours: 0.2 mg/m3 Form: Fume</p>

Biological exposure indices

No exposure indices known.

- 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

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical 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.

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 6 of 17
 Print Date 01/02/2026

- 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 if a risk assessment indicates this is necessary.
- Body protection** : 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 product.
- Respiratory protection** : 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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

- Physical state** : solid [Pellets.]
- Color** : TAN
- Odor** : Faint odor.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point or initial boiling point and boiling range** : Not available.
- Flash point** : Not applicable.
- Evaporation rate** : Not available.
- Flammability** : Not available.
- Lower and upper explosion limit/flammability limit** : **Lower:** Not applicable.
Upper: Not applicable.

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
Revision Date 12/29/2025

Page 7 of 17
Print Date 01/02/2026

Vapor pressure	:	Not available.
Relative vapor density	:	Not applicable.
Relative density	:	Not available.
Solubility in water	:	insoluble in water.
Partition coefficient: n-octanol/water	:	Not applicable.
Auto-ignition temperature	:	Not applicable.
Decomposition temperature	:	Not available.
Viscosity	:	Dynamic : Not available. Kinematic : Not applicable.

Particle characteristics

Median particle size	:	Not available.
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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

Information on toxicological effects

Acute toxicity

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 8 of 17
 Print Date 01/02/2026

Product/ingredient name	Result
Copper	Rat - Oral - LD50 482 mg/kg

Conclusion/Summary : Mixture.Not fully tested.

Skin corrosion/irritation

Conclusion/Summary : Mixture.Not fully tested.

Serious eye damage/eye irritation

Conclusion/Summary : Mixture.Not fully tested.

Respiratory corrosion/irritation

Conclusion/Summary : Mixture.Not fully tested.

Respiratory or skin sensitization

Skin

Conclusion/Summary : Mixture.Not fully tested.

Respiratory

Conclusion/Summary : Mixture.Not fully tested.

Germ cell mutagenicity

Conclusion/Summary : Mixture.Not fully tested.

Carcinogenicity

Conclusion/Summary : Mixture.Not fully tested.

Reproductive toxicity

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 9 of 17
 Print Date 01/02/2026

Conclusion/Summary : Mixture.Not fully tested.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Not available.

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.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 10 of 17
 Print Date 01/02/2026

Conclusion/Summary : Mixture. Not fully tested.

- General** : No known significant effects or critical hazards.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Reproductive toxicity** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral	Dermal	Inhalation (gases)	Inhalation (vapors)	Inhalation (dusts and mists)
Copper	482 mg/kg	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
XGT-42589-0004A-01-1	Remarks: Chemicals are not readily available as they are bound within the polymer matrix.
Copper	<p>Acute LC50 Marine water Fish - <i>Periophthalmus waltoni</i> 0.00756 Mg/l [96 h]</p> <p>Acute EC50 Fresh water Daphnia - <i>Daphnia longispina</i> 0.0021 Mg/l [48 h]</p> <p>Acute LC50 Marine water Crustaceans - <i>Amphipoda</i> 0.000072 Mg/l [48 h]</p> <p>Acute EC50 Fresh water Aquatic plants - <i>Lemna minor</i> 1.1 Mg/l [96 h]</p> <p>Acute IC50 Fresh water Algae - <i>Chlorella pyrenoidosa</i> 0.016 Mg/l [72 h]</p> <p>Acute IC50 Marine water Aquatic plants - <i>Plantae</i> 5.4 Mg/l [72 h]</p>

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 11 of 17
 Print Date 01/02/2026

	<p>Chronic NOEC Marine water Algae - <i>Nitzschia closterium</i> 0.0025 Mg/l [72 h]</p> <p>Chronic NOEC Fresh water Aquatic plants - <i>Ceratophyllum demersum</i> 7 Mg/l [72 h]</p> <p>Chronic NOEC Fresh water Fish - <i>Oreochromis niloticus</i> 0.0008 Mg/l [42 d]</p> <p>Chronic NOEC Fresh water Crustaceans - <i>Cambarus bartonii</i> 0.02 Mg/l [21 d]</p> <p>Chronic NOEC Fresh water Daphnia - <i>Daphnia magna</i> 0.002 Mg/l [21 d]</p>
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Conclusion/Summary : Not available.

Persistence and degradability

Not available.

Conclusion/Summary : Chemicals are not readily available as they are bound within the polymer matrix.

Bioaccumulative potential

Not available.

Mobility in soil

Soil/Water partition coefficient : Not available.

Mobility : Chemicals are not readily available as they are bound within the polymer matrix.

Other adverse effects

No known significant effects or critical hazards.

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

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 12 of 17
 Print Date 01/02/2026

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.

Section 14. Transport information

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

Section 15. Regulatory information

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

TSCA 12(b) - Chemical export notification

- Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed

SARA 302/304

Composition/information on ingredients

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
Revision Date 12/29/2025

Page 13 of 17
Print Date 01/02/2026

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

No products were found.

Name	%	Classification
Copper	>= 80 - 100	ACUTE TOXICITY - oral - Category 4

SARA 313

Form R - Reporting requirements

Product name	CAS number	%
Copper	7440-50-8	>= 80 - 100

Supplier notification

Product name	CAS number	%
Copper	7440-50-8	>= 80 - 100

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.

State regulations

- Massachusetts** : The following components are listed:
Copper
- New York** : The following components are listed:
Copper
- New Jersey** : The following components are listed:
COPPER
- Pennsylvania** : The following components are listed:
COPPER FUMECOPPER DUST

SAFETY DATA SHEET**XGT-42589-0004A-01-1**Version Number 1.1
Revision Date 12/29/2025Page 14 of 17
Print Date 01/02/2026**California Prop. 65**

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals****Chemical Weapons Convention List Schedule I Chemicals**

None of the components are listed.

Chemical Weapons Convention List Schedule II Chemicals

None of the components are listed.

Chemical Weapons Convention List Schedule III Chemicals

None of the components are listed.

Montreal Protocol

None of the components are listed.

Stockholm Convention on Persistent Organic Pollutants**Annex A - Elimination - Production**

None of the components are listed.

Annex A - Elimination - Use

None of the components are listed.

Annex B - Restriction - Production

None of the components are listed.

Annex B - Restriction - Use

None of the components are listed.

Annex C - Unintentional - Production

None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC)**Rotterdam Convention on Prior Informed Consent (PIC) - Industrial**

None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC) - Pesticide

None of the components are listed.

Rotterdam Convention on Prior Informed Consent (PIC) -Severely hazardous pesticide

SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
 Revision Date 12/29/2025

Page 15 of 17
 Print Date 01/02/2026

None of the components are listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Heavy metals - Annex 1

None of the components are listed.

POPs - Annex 1 - Production

None of the components are listed.

POPs - Annex 1 - Use

None of the components are listed.

POPs - Annex 2

None of the components are listed.

POPs - Annex 3

None of the components are listed.

Inventory list

- Australia** : All components are listed or exempted.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.
- Eurasian Economic Union** : **Russian Federation inventory:** All components are listed or exempted.
- Japan** : **Japan inventory (CSCL):** Not determined.
Japan inventory (ISHL): Not determined.
- New Zealand** : All components are listed or exempted.
- Philippines** : All components are listed or exempted.
- Republic of Korea** : All components are listed or exempted.
- Taiwan** : All components are listed or exempted.
- Thailand** : All components are listed or exempted.
- Turkey** : Not determined.
- United States** : All components are active or exempted.
- Viet Nam** : All components are listed or exempted.

Section 16. Other information

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

Health	/	0
Flammability		0
Physical hazards		0

SAFETY DATA SHEET

XGT-42589-0004A-01-1

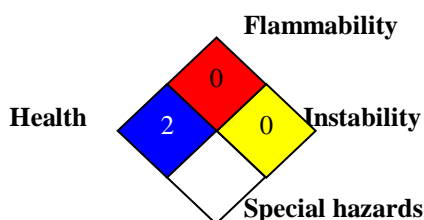
Version Number 1.1
 Revision Date 12/29/2025

Page 16 of 17
 Print Date 01/02/2026

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.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Not classified.

History

- Date of printing** : 01/02/2026
- Date of issue/Date of revision** : 12/29/2025
- Date of previous issue** : 10/15/2025
- Version** : 1.1
- Prepared by** : EHS_BATCH
- Key to abbreviations** :
 - ATE = Acute Toxicity Estimate
 - BCF = Bioconcentration Factor
 - DOT = Department of Transportation
 - GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 - IATA = International Air Transport Association
 - IBC = Intermediate Bulk Container
 - IMDG = International Maritime Dangerous Goods
 - IMO = International Maritime Organization
 - 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)
 - N/A = Not available
 - SGG = Segregation Group
 - TDG = Transportation of Dangerous Goods
 - UN = United Nations
- References** : Not available.



SAFETY DATA SHEET

XGT-42589-0004A-01-1

Version Number 1.1
Revision Date 12/29/2025

Page 17 of 17
Print Date 01/02/2026

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.