GOLD LEAF AND METALLIC POWDERS

Bronze Powder

Page : 1 / 12 Revision nr : 3 Issue date : 09/03/2015 Supersedes : 26/06/2013

SECTION 1: Identification of the sul	ostance/mixture and of the company/undertaking
1.1. Product identifier	
Trade name/designation :	Bronze Powder
Product code :	11 (Leaf/Lining Rich Pale Gold)
1.2. Relevant identified uses of the sub	stance or mixture and uses advised against
Main use category :	Industrial uses, Professional use
1.3. Details of the supplier of the safety	v data sheet
Company	: Distributed by:
	Gold Leaf and Metallic Powders
	6001 Santa Monica Boulevard
	Los Angeles, CA 90038 USA Telephone (800) 569-5323
	E-mail: info@glandmp.com
1.4. Emergency telephone number	Website: www.GLandMP.com
Emergency telephone	 +32 (0)475 38 36 83 (This telephone number is available 24 hours per day, 7 days per week.)
IRELAND (REPUBLIC OF)	
National Poisons Information Centre	
Beaumont Hospital UNITED KINGDOM	+353 18 37 99 64/+353 1 809 21 66
National Poisons Information Service	
(Newcastle Centre) Regional Drugs and Therapeutics Centre, Wolfson Unit	0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EU) 1272/2008

CLP-Classification

: The product is classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

Flam. Sol. 2H228Aquatic Acute 1H400Aquatic Chronic 1H410

Full text of H-phrases: see section 16

2.1.2. Classification according to EU Directives 67/548/EEC or 1999/45/EC

Classification F; R11 N; R50/53

: This mixture is classified as hazardous according to 1999/45/EC.

Full text of R-phrases: see section 16

GoldLeafand	SAFETY DATA SHEET	Page : 2 / 12 Revision nr : 3 Issue date : 09/03/2015
	Bronze Powder	Supersedes : 26/06/2013

2.2. Label elements

2.2.1. Labelling according to Regulation (EU) 1272/2008

:

:

:

:

:

Hazard pictograms



Signal word Hazard statements

H228 - Flammable solid.

Precautionary statements

- H410 Very toxic to aquatic life with long lasting effects. P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P273 Avoid release to the environment.

2.2.2. Labelling according to Directives (67/548 - 1999/45)

Not relevant

2.3. Other hazards

Other hazards

PBT/vPvB data Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Substance name	Product identifier	%	Classification according to Directive 67/548/EEC
copper	(CAS No.) 7440-50-8 (EC No) 231-159-6 (REACH-no) 01-2119480154-42-XXXX	70 - 90	Xn; R22 N; R50 F; R11 R53
Zinc powder - zinc dust (stabilized)	(CAS No.) 7440-66-6 (EC No) 231-175-3 (EC Index) 030-002-00-7 (REACH-no) 01-2119467174-37-XXXX	10 - 30	N; R50/53

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
copper	(CAS No.) 7440-50-8 (EC No) 231-159-6 (REACH-no) 01-2119480154-42-XXXX	70 - 90	Flam. Sol. 1, H228 Acute Tox. 4 (Oral), H302 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 2, H411
Zinc powder - zinc dust (stabilized)	(CAS No.) 7440-66-6 (EC No) 231-175-3 (EC Index) 030-002-00-7 (REACH-no) 01-2119467174-37-XXXX	10 - 30	Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Full text of R- and H-phrases: see section 16

Comments

(1) Flammable solid.

:

(UN Test N.1: Test method for readily combustible solids)

SECTION 4: First aid measures

4.1. Description of first aid measures	
Inhalation	: Provide fresh air. When in doubt or if symptoms are observed, get medical advice.
Skin contact	: No hazards which require special first aid measures.

GOLDLEAFAND	SAFETY DATA SHEET	Page : 3 / 12 Revision nr : 3 Issue date : 09/03/2015 Supersedes : 26/06/2013
	Bronze Powder	
Eye contact	: Rinse immediately with plenty of water, also und least 15 minutes. If symptoms persist, call a physician.	er the eyelids, for at
In case of ingestion	: When in doubt or if symptoms are observed, get	medical advice.
Additional advice	: Treat symptomatically. See also section 8 First aider: Pay attention to self-protection! When in doubt or if symptoms are observed, get	medical advice.
4.2. Most important sy	mptoms and effects, both acute and delayed	
Inhalation	: Repeated or prolonged exposure: (dust) : May ca	ause respiratory

	impairment and lung damage.
Skin contact	: No adverse effects are expected.
Eye contact	: Dust contact with the eyes can lead to mechanical irritation.
Ingestion	: May be irritating.
Other adverse effects	: none.

4.3. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures		
5.1. Extinguishing media		
Suitable extinguishing media	: Foam, ABC-powder, Carbon dioxide, Dry sand	
Extinguishing media which must not be use for safety reasons:	ed : Water	
5.2. Special hazards arising from the substance or mixture		
Fire hazard	: Flammable solid	
Specific hazards	 Hazardous decomposition products metal oxides Do not allow run-off from fire-fighting to enter drains or water courses. 	
	Dispose according to legislation.	
5.3. Advice for firefighters		
Advice for firefighters	: Special protective equipment for firefighters. In case of fire: Wear self-contained breathing apparatus.	

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures		
For non-emergency personnel	 Evacuate area. Prevent unauthorised persons entering the zone. Provide adequate ventilation. Use personal protective equipment as required. Personal protection equipment: see section 8 Avoid generation of dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition 	
For emergency responders	 sources. No smoking. Ensure procedures and training for emergency decontamination and disposal are in place. Personal protection equipment: see section 8. 	
6.2. Environmental precautions Environmental precautions	: Do not allow to enter into surface water or drains.	

GoldLeafand	SAFETY DATA SHEET	Page : 4 / 12 Revision nr : 3 Issue date : 09/03/2015
	Bronze Powder	Supersedes : 26/06/2013

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Stop leak if safe to do so. Dam up. Take up mechanically. Do not rinse down with water. / Water (with cleaning agent) Dispose according to legislation.

6.4. Reference to other sections

Personal protection equipment: see section 8 Disposal: see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	
Handling Advices on general occupational hygiene	 Provide adequate ventilation. Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Personal protection equipment: see section 8 Avoid generation of dust. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take any precaution to avoid mixing with incompatible materials. See also section 10 Do not allow to enter into surface water or drains. Keep good industrial hygiene. When using do not eat, drink or smoke. Wash hands before breaks and immediately after using the product.
	Take off contaminated clothing.
7.2. Conditions for safe storage, in	cluding any incompatibilities
Storage	 Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10. Protect against water. / Humidity
Packaging materials	: Keep/Store only in original container.
7.3 Specific end use(s)	
No data available.	

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

:

copper (7440-50-8	8)	
Austria	MAK (mg/m³)	1 mg/m ³ (inhalable fraction) 0,1 mg/m ³ (respirable fraction, smoke)
Austria	MAK Short time value (mg/m³)	4 mg/m ³ (inhalable fraction) 0,4 mg/m ³ (respirable fraction, smoke)
Belgium	Limit value (mg/m³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)
Bulgaria	OEL TWA (mg/m ³)	0,1 mg/m ³ (metal vapor)
Croatia	GVI (granična vrijednost izloženosti) (mg/m³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust)

GOLDLEAFAND
MetallicPowders

SAFETY DATA SHEET

Page : 5 / 12 Revision nr : 3 Issue date : 09/03/2015 Supersedes : 26/06/2013

Bronze Powder

copper (7440-50-8) Croatia	KGVI (kratkotrajna granična vrijednost	2 mg/m ³ (dust and fumes)	
	izloženosti) (mg/m ³)		
France	VLE (mg/m ³)	2 mg/m ³ (dust)	
France	VME (mg/m³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust)	
Greece	OEL TWA (mg/m³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust)	
Greece	OEL STEL (mg/m³)	2 mg/m ³ (dust)	
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m ³)	0,2 mg/m ³ (fume)	
Latvia	OEL TWA (mg/m ³)	0,5 mg/m³	
Spain	VLA-ED (mg/m³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)	
Switzerland	VLE (mg/m ³)	0,2 mg/m ³ (inhalable)	
Switzerland	VME (mg/m ³)	0,1 mg/m ³ (inhalable)	
Netherlands	Grenswaarde TGG 8H (mg/m ³)	0,1 mg/m ³ (inhalable fraction)	
United Kingdom	WEL TWA (mg/m³)	1 mg/m ³ (dust and mists) 0,2 mg/m ³ (fume)	
United Kingdom	WEL STEL (mg/m ³)	0,6 mg/m ³ (calculated-fume) 2 mg/m ³ (dust and mist)	
Czech Republic	Expoziční limity (PEL) (mg/m³)	1 mg/m ³ (dust) 0,1 mg/m ³ (fume)	
Denmark	Grænseværdie (langvarig) (mg/m ³)	1,0 mg/m ³ (dust and powder) 0,1 mg/m ³ (fume)	
Finland	HTP-arvo (8h) (mg/m ³)	1 mg/m ³ 0,1 mg/m ³ (respirable dust and fume)	
Hungary	AK-érték	1 mg/m ³ 0,1 mg/m ³ (fume)	
Hungary	CK-érték	4 mg/m ³ 0,4 mg/m ³ (fume)	
Ireland	OEL (8 hours ref) (mg/m ³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)	
Ireland	OEL (15 min ref) (mg/m3)	0,6 mg/m ³ (calculated-fume) 2 mg/m ³ (dust and mist)	
Lithuania	IPRV (mg/m ³)	1 mg/m ³ (inhalable fraction) 0,2 mg/m ³ (respirable fraction)	
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	0,1 mg/m ³ (fume) 1 mg/m ³ (dust)	
Norway	Gjennomsnittsverdier (Korttidsverdi) (mg/m3)	0,3 mg/m ³ (fume) 3 mg/m ³ (dust)	
Poland	NDS (mg/m ³)	0,2 mg/m ³	
Romania	OEL TWA (mg/m ³)	0,50 mg/m ³ (powder)	
Romania	OEL STEL (mg/m ³)	0,20 mg/m ³ (fume) 1,50 mg/m ³ (dust)	
Slovakia	NPHV (priemerná) (mg/m ³)	1 mg/m ³ (dust) 0,1 mg/m ³ (fume)	
Slovakia	NPHV (Hraničná) (mg/m³)	2 mg/m ³ (dust) 0,2 mg/m ³ (fume)	
Sweden	nivågränsvärde (NVG) (mg/m ³)	1 mg/m ³ (total dust) 0,2 mg/m ³ (respirable dust)	

SAFETY DATA SHEET

GOLD LEAF AND METALLIC POWDERS

Bronze Powder

Page : 6 / 12 Revision nr : 3 Issue date : 09/03/2015 Supersedes : 26/06/2013

Switzerland V	/LE (mg/m³)		0,4 mg/m ³ (respirable)
Switzerland V	/ME (mg/m³)		0,1 mg/m ³ (respirable) 2 mg/m ³ (inhalable)
Recommended monitoring proc	cedures :	Concentration measuremen Personal air monitoring	t in air
3.2. Exposure controls			
Personal protection equipment	:		ment must be selected according to the of the dangerous substance at the specific
Respiratory protection	:	Use appropriate respiratory Effective dust mask. (EN 14 Respirator with a particle fill Full face mask (EN 136) Half-face mask (DIN EN 144 Filter type: P3	9) er (EN 143) :
Hand protection	:	mechanical risks.,The select application and time of use account other factors on the other chemicals that are pos	with EN 388 as a protection against tion of specific gloves for a specific in a working area, should also take into a working space, such as (but not limited to): ssibly used, physical requirements rilling, skill, thermal protection), and the the supplier of gloves.
Eye protection	:	Wear eye glasses with side	protection according to EN 166.
Body protection	:	No special protective equip	nent required.
hermal hazard protection	:	Use dedicated equipment. Not required under normal u	ISE.
Engineering control measures	:	Use only in area provided w Organisational measures to exposure See also section 7	ith appropriate exhaust ventilation. prevent/limit releases, dispersion and
Environmental exposure contro	ols :	Do not allow to enter into su Comply with applicable Con legislation.	Irface water or drains. Inmunity environmental protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	: Powder
Colour	: gold
Odour	: odourless
Odour threshold:	: No data available
Odour threshold:	: No data available
pH	: Not applicable
Melting point/freezing point	: 850 °C
Initial boiling point and boiling range	: No data available
Flash point	: Not applicable
1	: No data available
Evaporation rate	
Flammability (solid, gas)	: Flammable., (UN Test N.1: Test method for readily combustible solids)

GoldLeafand	AFETY DATA SHEET	Page : 7 / 12 Revision nr : 3 Issue date : 09/03/2015
	Bronze Powder	Supersedes : 26/06/2013
Upper/lower flammability or explosive limits	: No data available	L
Vapour pressure	: No data available	
Vapour density	: No data available	
Density	: 7,14 - 8,96 g/cm ³ @ 20 °C	
Relative density	: No data available	
Water solubility	: Insoluble	
Solubility in different media	: No data available	
Partition coefficient n-octanol/water	: Not applicable	
Auto-ignition temperature	: Not applicable	
Decomposition temperature	: No data available	
Viscosity	: Not applicable	
Explosive properties	: Not applicable The study does not need to be conducted be chemical groups associated with explosive pro-	

molecule.

:

Not applicable

oxidising properties.

Oxidising properties

9.2. Other information

Other information

: (Apparent) Density : 0,5 - 1,3 g/cm³ @ 20°C

The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with

SECTION 10: Stability and reactivity		
10.1. Reactivity		
Reactivity :	None under normal processing. Reference to other sections: 10.5	
10.2. Chemical stability		
Stability :	The product is stable under storage at normal ambient temperatures.	
10.3. Possibility of hazardous reactions		
Possibility of hazardous reactions :	Reference to other sections: 10.4	
10.4. Conditions to avoid		
Conditions to avoid :	Remove all sources of ignition. See also section 7	
10.5. Incompatible materials		
Incompatible materials :	Acids and bases ., Oxidising substances ., Halogens ., Halogenated compounds .	
10.6. Hazardous decomposition products		
Hazardous decomposition products :	metal oxides	

SECTI	SECTION 11: Toxicological information		
<u>11.1.</u>	Information on toxicological effects		

Acute toxicity

: Not classified (Based on available data, the classification criteria are not met.)

Zinc powder - zinc dust (stabilized) (7440-66-6)	
LD50/oral/rat	> 2000 mg/kg
LC50/inhalation/4h/rat	> 5410 mg/m ³

	Revision nr : 3 Issue date : 09/03/2015
Bronze Powder	Supersedes : 26/06/2013
	Bronze Powder

Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: Not applicable
Serious eye damage/eye irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: Not applicable
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met.)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met.)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met.)

Zinc powder - zinc dust (stabilized) (7440	D-66-6)
NOAEL (oral, rat, 90 days)	31,52 mg/kg bodyweight/day

Aspiration hazard

: Not classified (Based on available data, the classification criteria are not met.)

Other information

Symptoms related to the physical, chemical and toxicological characteristics, Reference to other sections: 4.2

SECTION 12: Ecological information			
<u>12.1.</u>	Toxicity		
Toxicity	:	Very toxic to aquatic organisms, may cause long-term adverse effects in the	

Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

copper (7440-50-8)		
LC50 fish 1	0,0068 - 0,0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)	
EC50 Daphnia 1	0,03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])	
EC50 other aquatic organisms 1	0,0426 - 0,0535 mg/l (72 h - Pseudokirchneriella subcapitata)	
LC50 fish 2	< 0,3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
EC50 other aquatic organisms 2	0,031 - 0,054 mg/l (96 h - Pseudokirchneriella subcapitata)	
EC50 72h algae [mg/l] (1)	0,0426 - 0,0535 mg/l (Species: Pseudokirchneriella subcapitata [static])	
EC50 96h algae [mg/l] (1)	0,031 - 0,054 mg/l (Species: Pseudokirchneriella subcapitata [static])	

Zinc powder - zinc dust (stabilized) (7440-66-6)		
LC50 fish 1	439 μg/l	
EC50 Daphnia 1	1833 - 2909 μg/l	
EC50 72h algae [mg/l] (1)	0,09 - 0,125 mg/l (Species: Pseudokirchneriella subcapitata [static])	
EC50 96h algae [mg/l] (1)	0,11 - 0,271 mg/l (Species: Pseudokirchneriella subcapitata [static])	
NOEC chronic fish	30 d 169 µg/L	
NOEC chronic crustacea	25 - 50 μg/L	

GoldLeafand MetallicPowders

Bronze Powder

Page : 9 / 12 Revision nr : 3 Issue date : 09/03/2015 Supersedes : 26/06/2013

Additional information	EC10, algae: 2.5 - 48 µg/L
	NOEC, Chronic Toxicity to aquatic plants: 60 µg/L
	EC50, microorganisms: 5.2 mg/l
	NOEC, aquatic organisms: 10 - 15 µg/L
	LOEC, aquatic organisms: 10 - 15 µg/L
12.2. Persistence and degradability	l de la constante de
Persistence and degradability	: Not applicable
ersistence and degradability	
12.3. Bioaccumulative potential	
Bioaccumulation	: No data available
Partition coefficient n-octanol/water	: Not applicable
12.4. Mobility in soil	
Mobility	: No data available
viobility	
12.5. Results of PBT and vPvB ass	<u>essment</u>
PBT/vPvB data	: PBT/vPvB data :
	Not applicable

Other information

13.1. Waste treatment methods	
Product waste:	: Do not dispose of together with household waste. If recycling is not practicable, dispose of in compliance with local regulations.
Contaminated packaging	: Delivery to an approved waste disposal company.
Further ecological information	: Do not allow to enter into surface water or drains.
List of proposed waste codes/waste designations in accordance with EWC	: Classified as hazardous waste according to European Union regulations. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

:

<u>14.1. UN number</u> UN number	: 3089
14.2. UN proper shipping name	
Proper Shipping Name Proper shipping name IATA/IMDG	: METAL POWDER, FLAMMABLE, N.O.S.(Copper () Zinc ()) : METAL POWDER, FLAMMABLE, N.O.S. (Copper () Zinc ())
14.3. Transport hazard class(es)	
14.3.1. Overland transport	
ADR/RID	: tunnel restriction code : E
Class(es)	: 4.1 - Flammable solids, self-reactive substances and solid desensitized explosives
Hazard identification number (Kemler No.)	: 40
Classification code	: F3

GoldLeafand	SAFETY DATA SHEET	Page : 10 / 12 Revision nr : 3 Issue date : 09/03/2015
	Bronze Powder	Supersedes : 26/06/2013
ADR/RID-Labels	: 4.1 - Flammable solid	
14.3.2. Inland waterway tra Class (UN)	nsport (ADN) : 4.1	
14.3.3. Transport by sea Class or Division	: 4.1 - Flammable solids, self-reactive substances a	and solid desensitized explosives
14.3.4. Air transport Class or Division 14.4. Packing group	: 4.1 - Flammable solids, self-reactive substances a	and solid desensitized explosives
Packing group 14.5. Environmental haz	: III	
Environmental hazards	: N	
Other information	: Not applicable.	
14.6 Special precaution		
Special precautions for user	: Not applicable.	
	according to Annex II of MARPOL 73/78 and the IBC Code	
Code: IBC	: Not applicable.	

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006	:	
40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	:	Bronze Powder
This product contains an ingredient according to the candidate list of Annex XIV of the REACH Regulation 1907/2006/EC.	:	none
Authorisations	:	Not applicable

15.1.2. National regulations

GOLDLEAFAND	ETY DATA SHEET	Page : 11 / 12 Revision nr : 3 Issue date : 09/03/2015
	Bronze Powder	
DE : WGK DE : German storage class (LGK) DE : TA-Luft DE : Technische Regeln für Gefahrstoffe (TRGS) FR : Installations classées NL : ABM NL : NeR (Nederlandse emissie Richtlijn)	 2 LGK 4.1B - Flammable solids Total dust applicable 1450;117X 4 - Very toxic to aquatic organisms, may effects in the aquatic environment. (A) Inorganic substances in powdered form 	cause long-term adverse

Chemical Safety Assessment

: For this substance a chemical safety assessment has been carried out. Copper Zinc

SECTION 16: Other information

Full text of R-, H- and EUH-phrases: Acute Tox. 4 (Oral) Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Flam. Sol. 1 Flam. Sol. 2 H228 H302 H400 H410 H411 R11 R22 R50 R50/53 R53 F N Xn	 Acute toxicity Category 4 Hazardous to the aquatic environment - Aquatic Acute 1 Hazardous to the aquatic environment - chronic hazard category 1 Hazardous to the aquatic environment - chronic hazard category 2 Flammable solids, Hazard Category 1 Flammable solids, Category 2 Flammable solid. Harmful if swallowed. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Harmful if swallowed. Very toxic to aquatic organisms. Very toxic to aquatic organisms. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. May cause long-term adverse effects in the aquatic environment. Highly flammable Dangerous for the environment Harmful
Key literature references and sources for data	: European Metal Particulate Association (EMPA)
Abbreviations and acronyms	 ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals TWA = time weighted average STEL = Short term exposure limit PBT = persistent, bioaccumulating and toxic (PBT). vPvB = very persistent and very bioaccumulating EWC = European Waste Catalogue NA = Not applicable

GoldLeafand	SAFETY DATA SHEET	Page : 12 / 12 Revision nr : 3 Issue date : 09/03/2015
	Bronze Powder	Supersedes : 26/06/2013

The contents and format of this SDS are in accordance with EEC Commission Directive 1999/45/EC, 67/548/EC, 1272/2008/EC and EEC Commission Regulation 1907/2006/EC (REACH) Annex II.

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.