

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:**
resi-TINT+ Metallic Powder (Rich Gold / Aluminium / Copper)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
No additional information available
- 1.3 Details of the supplier of the safety data sheet**
Eli-Chem Resins UK Ltd
212 Dunsfold Park
Canada Avenue
Cranleigh
GU6 8GA
United Kingdom
Phone: 01483 266636
+44 (0)1483 266636 (09:00 - 17:00 Mon-Thur / 09:00 - 16:00 Fri)
sales@elichem.co.uk
- 1.4 Emergency telephone number:**
0044 (0) 01483 266636 (Office Hours Only)

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.
Aquatic Acute 1 H400
Aquatic Chronic 1 H410
Full text of H-phrases: see section 16
- 2.1.2 Classification according to EU Directives 67/548/EEC or 1999/45/EC:**
Classification : This mixture is classified as hazardous according to 1999/45/EC.
N; R50/53
Full text of R-phrases: see section 16
- 2.2 Label elements:**
- 2.2.1 Labelling according to Regulation (EU) 1272/2008**
Hazard pictograms:
GHS09 Signal word : Warning
Hazard statements:
H410 - Very toxic to aquatic life with long lasting effects.
Precautionary statements:
P273 - Avoid release to the environment
P391 - Collect spillage
P501 - Dispose of contents/ container to an approved waste disposal plant
- 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 Substance:

Not applicable

3.2 Mixture:

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	N;R50 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	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 3, H412
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

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.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If symptoms persist, call a physician.

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 symptoms and effects, both acute and delayed:

Inhalation : Repeated or prolonged exposure: (dust) : May cause respiratory impairment & 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 used for safety reasons: Water
- 5.2 Special hazards arising from the substance or mixture:**
Fire hazard : Non-flammable.
Specific hazards : Hazardous decomposition products metal oxides.
Do not allow run-off from firefighting 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.
For emergency responders : 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.
- 6.3 Methods and material for containment and cleaning up:**
Methods for cleaning up:
Stop leak if safe to do so.
Prevent flow.
Take up mechanically.
Do not rinse down with water or water without 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 : 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.

Take any precaution to avoid mixing with incompatible materials.
See also section 10
Do not allow to enter into surface water or drains.
Advice on general occupational hygiene : 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, including 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

**8.1 Control parameters:
Exposure limit values:**

Copper (744-50-8)		
Austria	MAK (mg/m ³)	1 mg/m ³ (inhalable fraction) 0,1 mg/m ³ (respirable fraction, smoke)
Austria	MAK Short time value (mg/m ³)	4 mg/m ³ (inhalable fraction) 0,4 mg/m ³ (respirable fraction, smoke)
Belgium	Limit value (mg/m ³)	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 vapour)
Croatia	GVI (granicna vrijednost izozenosti (mg/m ³))	0,2 mg/m ³ (fume) 1 mg/m ³ (dust)
Croatia	KGVI (kratkotrajna granicna vrijednost izozenosti) (mg/m ³)	2 mg/m ³ (dust and fumes)
France	VLE (mg/m ³)	2 mg/m ³ (dust)
France	VME (mg/m ³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust)
Greece	OEL TWA (mg/m ³)	0,2 mg/m ³ (fume) 1 mg/m ³ (dust)
Greece	OEL STEL(mg/m ³)	2 mg/m ³ (dust)
Italy – Portugal – USA - ACGIH	ACGIH TWA(mg/m ³)	0,2 mg/m ³ (fume)

Copper (744-50-8)		
Latvia	OEL TWA (mg/m ³)	0,5 mg/m ³

Spain	VLA-ED (mg/m ³)	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/m ³)	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	Expozicni limity (PEL (mg/m ³))	1 mg/m ³ (dust) 0,1 mg/m ³ (fume)
Denmark	Graensevaerdie (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)
Copper (744-50-8)		
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/m ³)	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/m ³)	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 (Hranicná) (mg/m ³)	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)
Zinc powder – zinc dust (stabilized) (7440-66-6)		
Switzerland	VLE (mg/m ³)	0,4 mg/m ³ (respirable)
Switzerland	VME (mg/m ³)	0,1 mg/m ³ (respirable) 2 mg/m ³ (inhalable)

Recommended monitoring procedures:
Concentration measurement in air
Personal air monitoring

8.2 Exposure controls:
Personal protection equipment: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace:
Dust
Respiratory protection: Use appropriate respiratory protection.
Effective dust mask. (EN 149)
Respirator with a particle filter (EN 143) :
Full face mask (EN 136)
Half-face mask (DIN EN 140)
Filter type: P1
Hand protection: Wear gloves in accordance with EN 388 as a protection against mechanical risks. The selection of specific gloves for a specific application and time of use in a working area, should also take into account other factors on the working space, such as (but not limited to): other chemicals that are possibly used, physical requirements (protection against cutting/drilling, skill, thermal protection), and the instructions/specification of the supplier of gloves.
Eye protection: Wear eyeglasses with side protection according to EN 166.
Body protection: No special protective equipment required.
Thermal hazard protection: Use dedicated equipment.
Not required under normal use.
Engineering control measures: Use only in area provided with appropriate exhaust ventilation.
Organisational measures to prevent/limit releases, dispersion and exposure See also section 7
Environmental exposure controls: Do not allow to enter into surface water or drains.
Comply with applicable Community environmental protection legislation.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties: Appearance : Powder Colour : metallic shades (gold, aluminium, copper in appearance) 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

Evaporation rate : No data available
Flammability (solid, gas) : Non-flammable.
Upper/lower flammability or explosive limits : No data available
Vapour pressure : No data available
Vapour density : No data available
Density : 7,14 - 8,96 g/cm³ @ 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 because there are no chemical groups associated with explosive properties present in the molecule.

Oxidising properties : Not applicable
The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.

9.2 Other information:

Other information : (Apparent) Density : 0.6 - 1.4 g/cm³ @ 20°C

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

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 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/m³
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

<p>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.)</p> <p>Zinc powder - zinc dust (stabilized) (7440-66-6) 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.)</p> <p>Other information: Symptoms related to the physical, chemical, and toxicological characteristics, Reference to other sections: 4.2</p>
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SECTION 12: ECOLOGICAL INFORMATION

12.1 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: 96h – Species: Pimephales promelas)
EC50 Daphnia 1	0,03 mg/l (Exposure time: 48h – Species: Daphnia magna (Static))
LC50 fish 2	<0,3mg/l (Exposure time 96h – Species Pimephales promelas (Static))
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
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 - 15µg/l LOEC, aquatic organisms: 10 - 15µg/l

- 12.2 Persistence and degradability:**
Not applicable
- 12.3 Bioaccumulative potential:**
Bioaccumulation : No data available
Partition coefficient n-octanol/water : Not applicable
- 12.4 Mobility in soil:**
No data available
- 12.5 Results of PBT and PvB assessment:**
Not applicable
- 12.6 Other adverse effects:**
Other information :

SECTION 13: DISPOSAL CONSIDERATIONS

- 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.

SECTION 14: TRANSPORT INFORMATION

- 14.1 UN Number:**
UN number : 3077
- 14.2 UN proper shipping name:**
Proper Shipping Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Copper () Zinc ())
Proper shipping name IATA/IMDG : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(Copper () Zinc ())
- 14.3 Transport hazard class(es):**
- 14.3.1 Overland transport**
ADR/RID : tunnel restriction code : E
Class(es) : 9 - Miscellaneous dangerous substances and articles
Hazard identification number (Kemler No.) : 90
Classification code : M7
ADR/RID-Labels : 9 - Miscellaneous dangerous substances and articles
- 14.3.2 Inland waterway transport (ADN)**
Class (UN) : 9
- 14.3.3 Transport by sea**
Class or Division : 9 - Miscellaneous dangerous substances and articles
- 14.3.4 Air transport**
Class or Division : 9 - Miscellaneous dangerous substances and articles
- 14.4 Packing group**
Packing group : III
- 14.5 Environmental hazards**
Environmental hazards : N

- Other information : Not applicable.
- 14.6 Special precautions for user**
Special precautions for user : Not applicable.
- 14.7 Transport in bulk 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**
Restrictions on use : Not applicable
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**
DE : WGK : 2
DE : TA-Luft : Total dust
DE : Technische Regeln für Gefahrstoffe (TRGS) : applicable
FR : Installations classées : 117X
NL : ABM : 4 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. (A)
NL : NeR (Nederlandse emissie Richtlijn) : Inorganic substances in powdered form
- 15.2 Chemical safety assessment:**
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:
Aquatic Acute 1 : Hazardous to the aquatic environment - Aquatic Acute 1
Aquatic Chronic 1 : Hazardous to the aquatic environment - chronic hazard category 1
Aquatic Chronic 3 : Hazardous to the aquatic environment - chronic hazard category 3
H400 : Very toxic to aquatic life.
H410 : Very toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.
R50 : Very toxic to aquatic organisms.
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53 : May cause long-term adverse effects in the aquatic environment.
N : Dangerous for the environment
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

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.

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.

i *The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.*