

# SAFETY DATA SHEET



According to directive 1907/2006/EC, 2020/878

Page: Page 1 from 16

Version 3.0

Revision date: 22-09-2022

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

## **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

### **1.1 Product identification:**

Product name: Critter Clay™ - all colours; Air Fire Clay™  
General use: Sculpting and modelling  
Product description: Self-curing water clay (moist) in various colours.  
Product form: The product is a wet clay solid, sold in 454gram/1 lb;  
2.27 kg/5 lb; 11.35 kg/25 lb.

### **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified use: The products are fine-textured wet clays in a variety of colours that air-dry to a hard flat finish. Excellent for students and professionals to model/mould freely for various purposes without the need for heat curing.

Uses not recommended: None

### **1.3 Details of the supplier of the safety data sheet:**

Responsible distributor : ASSYST bvba / A.S.O.W. bvba  
Hellegatstraat 13a  
2590 Berlaar  
Belgium  
Tel: +32 495 50 61 14 / +32 496 83 70 27  
Website: [www.assyst.org](http://www.assyst.org) / [www.artsuppliesonweb.com](http://www.artsuppliesonweb.com)  
E-mail: [ao@assyst.org](mailto:ao@assyst.org) / [vera.opsommer@assyst.org](mailto:vera.opsommer@assyst.org)

### **1.4 Emergency phone number:**

For Belgium: Call the **Poison Control Center (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.  
NHS 24 Direct For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

## **SECTION 2: Hazard identification**

### **2.1 Classification of the substance or mixture:**

#### **Classification according to Directive (EC) No 1272/2008 and its amendments.**

According to the Globally Harmonised Standard for Classification and Labelling (GHS), this product is considered hazardous due to the possibility of skin and eye irritation.

Specific organ toxicity on repeated exposure - Category 1 - crystalline silica.

Dangerous for the aquatic environment - Acute 3, Chronic 3

#### **Adverse physicochemical effects and adverse effects on human health and the environment:**

Crystalline silica (quartz) is carcinogenic as inhalable dust.

This only applies to the cured product if sanding and airborne dust occur.

The same applies to specific organ toxicity for repeated exposure to crystalline silica.

Product in uncured form poses no dust hazard.

Copper sulphate and sodium 2-biphenylate are aquatically toxic compounds.

These are bound in the clay matrix in both wet and hardened clay forms and are unlikely to leach into a water body unless the water body is extremely acidic.

Eye irritation category 1 is caused by the aluminium silicate (clay components) which is abrasive when it enters the eye.

# SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 2 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

Eye irritation with this product is expected to be physical and not chemical.

## 2.2 Label elements:

**Labelling in accordance with Regulation (EC) No 1272/2008 [CLP/GHS]:**



**Hazard pictograms:**

**Signal word:**

Danger

**Hazard statements:**

H350 - May cause cancer by inhalation of cured product dust.

H372 - Causes respiratory damage by prolonged exposure to airborne silica dust.

H320 - Causes eye irritation.

H315 - Causes skin irritation.

H412 - Harmful to aquatic life with long-lasting effects.

H411 - Toxic to aquatic organisms with long-lasting effects.

**Precautions:**

**General:**

P101 - If medical advice is required, keep the product packaging or label at hand.

P103 - Read the label before use.

**Prevention:**

P261 - Avoid breathing dust.

P280 - Wear protective gloves when modelling the wet clay. Wear at least an N95 dust mask when sanding the cured product.

P273 - Avoid discharge into the environment.

**Answer:**

P302 + 352 - If on skin: wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical attention.

P305 + P351 + P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

**Storage/Disposal:**

P404 - Store in original container according to manufacturer's instructions.

P501 - Dispose of waste according to local regulations.

## 2.3 Other hazards:

This substance/mixture does not contain any components that can be considered persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Ecological information:**

The substance/mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

**Toxicological information:**

The substance/mixture does not contain any components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

## **SECTION 3: Composition and information on ingredients**

### 3.2 Mixture:

This includes the variety of colours of Critter Clay™, Air Fire Clay™, Spectrum® Clays - all colours of self-curing water clay.

# SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

Page: Page 3 from 16

Version 3.0

Revision date: 22-09-2022

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

Chemical name	CAS number EC number	Classification (Regulation (EC) No 1272/008)	Concentration (%)
Kaolinite	1318-74-7 215-286-4	Not classified; a constituent of kaolin	0 - 30
Chlorite group minerals	1318-59-8 215-285-9	No hazards have been classified	0 - 30
Crystalline Silica (Quartz)	14808-60-7 238-878-4	STOT RE 1 - H372; Carc. 1A - H350; Acute Tox. 4 - H332	0 - 20
Hydrated aluminium silicate (Kaolin)	1332-58-7 310-194-1	Eye Irrit. - H319	0 - 13
Anhydrous aluminium silicate	12141-46-7 235-253-8	Eye Irrit. - H318	0 - 13
Polysaccharide (Dextrin)	9004-53-9 232-675-4	No hazards have been classified	0 - 8
Expanded Perlite	93763-70-3 618-970-4	Eye Irrit. - H319; Respir. Irrit. - H335; Skin Irrit. - H315	0 - 5
Magnesium silicate hydrate (talc)	14807-96-6 238-877-9	Acute Tox. 4 - H332; Eye Irrit. 2 - H319; asbestos-free	2
Titanium dioxide	13463-67-7 236-675-5	Not classified; ingredient is not a nanomaterial	0 - 2
Sodium 2-biphenylate	132-27-4 205-055-6	Aquatic Acute 1 - H400; Acute Tox 4 - H302; Eye Dam. 1 - H318; Skin Irrit. 2 - H315; STOT SE 3 - H335; Aquatic chronic 1 - H410  M-Factor M(Chronic)=1	0 - 1
FD&C food-grade dyes	Mixed Mixed	EU food use regulations; food use regulations do not apply to this product	0 - 1
Copper sulphate pentahydrate	7758-99-8 616-477-9	Aquatic chronic 1 - H410; Aquatic Acute 1-H400  M-Factor M=10 M(Chronic)=10	< 0.5
Polyethylene wax	9002-88-4 680-352-5	No hazards identified	0 - 0.5

For further explanation of abbreviations and hazard statements, see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures:

#### General first-aid measures:

Never give anything by mouth to an unconscious person.

If you feel unwell, consult a doctor.

Show the label where possible.

#### First aid measures after inhalation:

If symptoms occur, go outside and ventilate the room.

#### First-aid measures after skin contact:

After handling, wash hands with soap and water.

If irritation persists or other symptoms occur, seek medical attention.

#### First-aid measures after eye contact:

Remove the contact lens (if any).

# SAFETY DATA SHEET



According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 4 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

Immediately flush eyes with plenty of clean water for at least 15 minutes.

If necessary, gently hold the eyelid open while rinsing.

If the irritation persists, seek medical attention.

**First-aid measures after ingestion:**

No significant route of exposure.

If ingested, do not induce vomiting.

If discomfort or other symptoms persist, seek medical attention, referring to the label and safety data sheet.

**Emergency room self-protection:**

Not needed.

4.2 Main acute and delayed symptoms and effects:

**Symptoms/injuries:**

Under normal conditions of use not expected to present a significant hazard.

**Symptoms/injuries after inhalation:**

Not expected to be primary exposure route unless sanded after curing.

Dust is not expected to be measurable, given the average size of objects made with this product.

**Symptoms/injuries after skin contact:**

Prolonged hand contact with wet clay without protection can lead to dry and irritated hands.

**Symptoms/injuries after eye contact:**

Not expected to be a primary route of exposure.

The dust released when sanding the finished product can create dust that is an eye hazard.

**Symptoms/injuries after swallowing:**

Ingestion is not considered a primary route of exposure.

If swallowed, the material can cause constipation.

After ingestion, seek medical attention in case of discomfort.

4.3 Indication of immediate medical attention and special treatment required:

**Notes for the doctor:**

Product is a modelling clay with some variation in ingredients depending on the colour.

**Special treatment:**

No special treatment has been established for the product.

**SECTION 5: Fire-fighting measures**

5.1 Extinguishing media:

**Suitable extinguishing agents:**

Water mist or fine mist; dry chemical fire extinguishers; carbon dioxide fire extinguishers; foam; alcohol-resistant foam (ATC type).

**Unsuitable extinguishing media:**

Not known.

5.2 Special hazards arising from the substance or mixture:

**Hazardous combustion products:**

Carbon dioxide, carbon monoxide.

5.3 Advice for firefighters:

In case of fire, wear full protective clothing and a NIOSH-approved self-contained breathing apparatus with a full face piece that operates on pressure demand or other positive pressure mode.

For small outdoor fires, which can be easily extinguished with a portable fire extinguisher, the use of protective equipment is generally not necessary.

**Additional information:**

None.

According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 5 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

## **SECTION 6: Measures in case of accidental release of the substance or mixture**

### **6.1 Personal precautions, protective equipment and emergency procedures:**

#### **For non-emergency staff**

##### **Protective equipment**

None required

##### **Emergency procedures**

None required

#### **For social workers**

##### **Personal protective equipment**

None required

### **6.2 Environmental precautions:**

Untreated clay removed from packaging hardens into a hard, stony material that can be removed from land and sinks to the bottom of a water body.

The risk of significant release of this material into the environment is low, as the largest package weighs 11.35 kg and it is packaged in clump form.

Dispersion into the environment is not expected and release into the environment is unlikely.

### **6.3 Methods and materials for containment and cleaning:**

#### **For containment:**

No special methods are needed.

The material is not hazardous and can be disposed of as regular waste.

#### **To clean up:**

Dried-up residues can be removed with normal cleaning methods such as vacuuming and washing surfaces.

#### **Other information**

None.

### **6.4 Referral to other departments:**

#### **Additional information:**

Section 8.

## **SECTION 7: Handling and storage:**

### **7.1 Precautions for safe use**

#### **Protective measures:**

##### **Advice on safe use:**

The product is designed to be safely handled by children and adults as a wet modelling clay for making hard pieces.

There are no special guidelines for safe use.

##### **Fire prevention:**

Material is non-flammable.

No precautions needed.

##### **Prevention of aerosol and dust formation:**

The product is a wet solid and hardens.

Only sanding the product produces airborne dust.

It is not expected to be significant, but a KN95 or N95 dust mask can be worn during sanding.

##### **Environmental precautions:**

Not needed.

##### **Advice on general occupational hygiene:**

Wet clay can cause dehydration of the skin.

After working with the clay, washing the hands thoroughly and applying a hand cream will rehydrate the skin.

### **7.2 Conditions for safe storage, including incompatibilities:**

#### **Technical measures and storage conditions:**

##### **Packaging material:**

Store the wet clay in its original packaging.

# SAFETY DATA SHEET



According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 6 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

Close the packaging when not in use to prevent the material from drying out and mould spores and bacteria entering the unused material.

Do not store in a warm, wet environment that promotes mould growth.

For longer storage, this product is freeze-thaw stable and can be kept at cold temperatures.

## Requirements for storage rooms and vessels:

### Storage assembly tips:

#### Storage class:

Not applicable.

#### Materials to avoid:

Avoid strong acids as they react with the clay components, causing them to dissolve.

### 7.3 Specific end use:

The product is designed for individual users to make cast objects, mostly small, for decorative and utilitarian purposes.

The product is similar to modelling clay used to make pottery, but is designed to harden by air drying instead of being fired in a kiln.

## SECTION 8: Exposure controls/personal protection measures

### 8.1 Control parameters:

Chemical	Kaolin - CAS Number 1332-58-7		
Country	Limit value	Number	Comments
Austria			
Belgium	Limit value	2 mg/m <sup>3</sup>	
Bulgaria	OEL TWA		
France	VME	10 mg/m <sup>3</sup>	
Italy, Portugal, USA, ACGIH limit	ACGIH TLV	3 mg/m <sup>3</sup>	
Germany	DFG DAK		
Latvia	OEL TWA		
Spain	VLA-ED	2 mg/m <sup>3</sup>	
Czech Republic	Expzicni limity		
Denmark	Graensevaerdie (long-furred)	2 mg/m <sup>3</sup>	
Finland	HTP-arvo	2 mg/m <sup>3</sup>	
Hungary	AK-ertek		
Ireland	OEL TWA	2 mg/m <sup>3</sup>	
Lithuania	IRV		
Poland	NDS	10 mg/m <sup>3</sup>	
Romania	OEL TWA		
Sweden	NVG		
Portugal	OEL TWA		

Chemical	Quartz CAS number 14808-60-7		
Country	Limit value	Number	Comments
Austria		0.05 mg/m <sup>3</sup>	
Belgium	Limit value	0.1 mg/m <sup>3</sup>	
Bulgaria	OEL TWA		
France	VME	0.1 mg/m <sup>3</sup>	
Italy, Portugal, USA, ACGIH limit	ACGIH TLV		
Germany	DFG DAK		
Latvia	OEL TWA		
Spain	VLA-ED	0.05 mg/m <sup>3</sup>	
Czech Republic	Expzicni limity		
Denmark	Graensevaerdie (long-furred)	0.3 mg/m <sup>3</sup> 0.1 mg/m <sup>3</sup>	Inhalable aerosol Respirabel aerosol
Finland	HTP-arvo	0.05 mg/m <sup>3</sup>	
Hungary	AK-ertek	0.15 m/m <sup>3</sup>	Respirabel aerosol
Ireland	OEL TWA	0.1 mg/m <sup>3</sup>	
Lithuania	IRV		

# SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

Page: Page 7 from 16

Version 3.0

Revision date: 22-09-2022

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

Poland	NDS	0.1 mg/m <sup>3</sup>	
Romania	OEL TWA		
Sweden	NVG	0.1 mg/m <sup>3</sup>	
Portugal	OEL TWA		

Chemical	Titanium dioxide (CAS No 13463-67-7)		
Country	Limit value	Number	Comments
Austria			
Belgium	Limit value	10 mg/m <sup>3</sup>	
Bulgaria	OEL TWA		
France	VME	11 mg/m <sup>3</sup>	
Italy, Portugal, USA, ACGIH limit	ACGIH TLV		
Germany	DFG DAK	0.3 mg/m <sup>3</sup>	Respirable fraction except ultrafine particles
Latvia	OEL TWA	10 mg/m <sup>3</sup>	
Spain	VLA-ED		
Czech Republic	Expzicni limity		
Denmark	Graensevaerdie (long-furred)	6 mg/m <sup>3</sup>	Total dust
Finland	HTP-arvo		
Hungary	AK-ertek		
Ireland	OEL TWA	10 mg/m <sup>3</sup>	
Lithuania	IRV		
Poland	NDS	10 mg/m <sup>3</sup>	
Romania	OEL TWA	10 mg/m <sup>3</sup>	
Sweden	NVG	5 mg/m <sup>3</sup>	Inhalable aerosol
Portugal	OEL TWA		

Chemical	Perlite CAS number 93763-70-3		
Country	Limit value	Number	Comments
Austria			
Belgium	Limit value	5 mg/m <sup>3</sup>	
Bulgaria	OEL TWA	10 mg/m <sup>3</sup>	
France	VME		
Italy, Portugal, USA, ACGIH limit	ACGIH TLV		
Germany	DFG DAK		
Latvia	OEL TWA		
Spain	VLA-ED	4 mg/m <sup>3</sup>	
Czech Republic	Expzicni limity		
Denmark	Graensevaerdie (long-furred)		
Finland	HTP-arvo		
Hungary	AK-ertek		
Ireland	OEL TWA		
Lithuania	IRV		
Poland	NDS		
Romania	OEL TWA		
Sweden	NVG		
Portugal	OEL TWA		

Chemical	Copper Sulphate Pentahydrate - CAS Number 7758-99-8		
Country	Limit value	Number	Comments
Austria			
Belgium	Limit value		
Bulgaria	OEL TWA		
France	VME		
Italy, Portugal, USA, ACGIH limit	ACGIH TLV		
Germany	DFG DAK		
Latvia	OEL TWA		
Spain	VLA-ED		

# SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

Page: Page 8 from 16

Version 3.0

Revision date: 22-09-2022

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

Czech Republic	Expzicni limity		
Denmark	Graensevaerdie (long-furred)		
Finland	HTP-arvo	0.02 mg/m <sup>3</sup>	Respirable fraction calculated as Cu
Hungary	AK-ertek		
Ireland	OEL TWA		
Lithuania	IRV		
Poland	NDS		
Romania	OEL TWA		
Sweden	NVG		
Portugal	OEL TWA		

Chemical	Talc (CAS No 14807-96-6)		
Country	Limit value	Number	Comments
Austria		2.0 mg/m <sup>3</sup>	
Belgium	Limit value	2.0 mg/m <sup>3</sup>	
Bulgaria	OEL TWA		
France	VME		
Italy, Portugal, USA, ACGIH limit	ACGIH TLV		
Germany	DFG DAK		
Latvia	OEL TWA	4.0 mg/m <sup>3</sup>	
Spain	VLA-ED	2.0 mg/m <sup>3</sup>	
Czech Republic	Expzicni limity		
Denmark	Graensevaerdie (long-furred)	0.3 mg/m <sup>3</sup>	
Finland	HTP-arvo	0.5 fibres/cm <sup>3</sup>	
Hungary	AK-ertek	2.0 mg/m <sup>3</sup>	
Ireland	OEL TWA	2.0 mg/m <sup>3</sup>	
Lithuania	IRV		
Poland	NDS	4.0 mg/m <sup>3</sup>	
Romania	OEL TWA		
Sweden	NVG		
Portugal	OEL TWA		

Chemical	2-phenylphenol, sodium salt CAS number 132-27-4		
Country	Limit value	Number	Comments
Austria			
Belgium	Limit value		
Bulgaria	OEL TWA		
France	VME		
Italy, Portugal, USA, ACGIH limit	ACGIH TLV		
Germany	DFG DAK	2 mg/m <sup>3</sup>	Inhalable fraction
Latvia	OEL TWA		
Spain	VLA-ED		
Czech Republic	Expzicni limity		
Denmark	Graensevaerdie (long-furred)		
Finland	HTP-arvo		
Hungary	AK-ertek		
Ireland	OEL TWA		
Lithuania	IRV		
Poland	NDS		
Romania	OEL TWA		
Sweden	NVG		
Portugal	OEL TWA		

## DNEL / PNEC values

Derived no-effect exposure/predicted no-effect concentration

(Derived dose without effect / predicted concentration without effect)

# SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

Page: Page 9 from 16

Version 3.0

Revision date: 22-09-2022

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

## Sodium 2-biphenylate CAS number 132-27-4

DNEL	Mode	Duration	Operations	Value
Industry	Dermal	Short term	Systemic	high risk
Industry	Inhalation	Short term	Systemic	no hazard identified
Industry	Skin	Long-term	Systemic	21.84 mg/kg bw/day
Industry	Inhalation	Long-term	Systemic	19.25 mg/m3
Consumer	Skin	Short term	Systemic	high risk
Consumer	Inhalation	Short term	Systemic	no hazard identified
Consumer	Oral	Short term	Systemic	no hazard identified
Consumer	Skin	Long-term	Systemic	400 mg/kg bw/day
Consumer	Inhalation	Long-term	Systemic	1.2 mg/m3

PNEC	Value
Freshwater	600 ng/l
Seawater	60 ng/l
Sediment (freshwater)	128.4 mg/kg dw
Sediment (seawater)	12.84 mg/kg dw
Intermittent release	3.2 mg/l

## Quartz - CAS Number 14808-60-7

DNEL	Mode	Duration	Operations	Value
Industry	Skin	Short term	Systemic	No data.
Industry	Inhalation	Short term	Systemic	No data.
Industry	Skin	Long-term	Systemic	No data.
Industry	Inhalation	Long-term	Systemic	No data.
Consumer	Skin	Short term	Systemic	No data.
Consumer	Inhalation	Short term	Systemic	No data.
Consumer	Oral	Short term	Systemic	No data.
Consumer	Dermal	Long-term	Systemic	No data.
Consumer	Inhalation	Long-term	Systemic	No data.

PNEC	Value
Freshwater	No data.
Seawater	No data.
Sediment (freshwater)	No data.
Sediment (seawater)	No data.
Intermittent release	No data.

## Titanium dioxide - CAS Number 13463-67-7

DNEL	Mode	Duration	Operations	Value
Industry	Dermal	Short term	Systemic	No hazard identified
Industry	Inhalation	Short term	Systemic	No hazard identified
Industry	Skin	Long-term	Systemic	No hazard identified
Industry	Inhalation	Long-term	Systemic	170 mg/m3
Consumer	Skin	Short term	Systemic	No hazard identified
Consumer	Inhalation	Short term	Systemic	No hazard identified
Consumer	Oral	Short term	Systemic	No hazard identified
Consumer	Dermal	Long-term	Systemic	No hazard identified
Consumer	Inhalation	Long-term	Systemic	28 mg/m3

PNEC	Value
Freshwater	No hazard identified
Seawater	No hazard identified
Sediment (freshwater)	No hazard identified
Sediment (seawater)	No hazard identified
Intermittent release	No hazard identified

# SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

Page: Page 10 from 16

Version 3.0

Revision date: 22-09-2022

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

## Talk - CAS Number 14807-96-6

DNEL	Mode	Duration	Operations	Value
Industry	Dermal	Short term	Systemic	No hazard identified
Industry	Inhalation	Short term	Systemic	2.16 mg/m3
Industry	Dermal	Long-term	Systemic	43.2 mg/kg bw/day
Industry	Inhalation	Long-term	Systemic	2.16 mg/m3
Consumer	Skin	Short term	Systemic	No hazard identified
Consumer	Inhalation	Short term	Systemic	1.08 mg/m3
Consumer	Oral	Short term	Systemic	160 mg/kg bw/day
Consumer	Skin	Long-term	Systemic	2.27 mg/cm2
Consumer	Inhalation	Long-term	Systemic	1.08 mg/m3

PNEC	Value
Freshwater	597.97 mg/l
Seawater	141.26 mg/l
Sediment (freshwater)	31.33 mg/kg dw
Sediment (seawater)	3.13 mg/kg dw
Intermittent release	597.97 mg/l

## Copper sulphate pentahydrate - CAS Number 7758-98-7

DNEL	Mode	Duration	Operations	Value
Industry	Skin	Short term	Systemic	No hazard identified
Industry	Inhalation	Short term	Systemic	No hazard identified
Industry	Dermal	Long-term	Systemic	137 mg/kg bw/day
Industry	Inhalation	Long-term	Systemic	1 mg/m3
Consumer	Skin	Short term	Systemic	No hazard identified
Consumer	Inhalation	Short term	Systemic	No hazard identified
Consumer	Oral	Short term	Systemic	82 mg/kg bw/day
Consumer	Skin	Long-term	Systemic	No hazard identified
Consumer	Inhalation	Long-term	Systemic	No hazard identified

PNEC	Value
Freshwater	7.8 mg/l
Seawater	5.2 mg/l
Sediment (freshwater)	87 mg/kg dw
Sediment (seawater)	676 mg/kg dw
Intermittent release	No data.

### Mixture test data:

No data available on mixtures.

### 8.2 Control of exposure:

#### Appropriate engineering control equipment:

Not needed.

#### Eye and face protection:

Safety glasses when sanding cured material.

#### Skin protection:

Wearing gloves limits dexterity when working with wet clay and is generally not necessary.

If a user wishes to use gloves, 3 mil powder-free nitrile disposable gloves can be worn.

#### Respiratory protection:

N95 or KN95 dust mask when sanding the cured material.

#### Thermal hazards:

Not applicable to the material.

#### Managing environmental exposure:

Store in original container, seal container after removing applicable quantities. Store away from heat.

# SAFETY DATA SHEET

According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 11 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

## **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties:

Vapour pressure:	Not applicable
Specific gravity:	Moist - 1.8; cured 1.4
Vapour density:	not applicable
Evaporation rate:	not applicable
Freezing point:	Freeze/thaw stable
Odour:	Negligible
Appearance:	depending on the chosen colour
Physical state:	Wet solid
Flammability range:	not applicable
Solubility in water:	Negligible
pH value:	Moist clay 6 - 8
Boiling point:	not applicable
Viscosity:	not applicable
Flash point:	not applicable

### 9.2 Other information

Explosives:	Not applicable
Flammable gases:	Not applicable
Flammable aerosols:	Not applicable
Oxidising gases:	Not applicable
Gases under pressure:	Not applicable
Flammable liquids:	Not applicable
Combustible solids:	Not applicable
Self-reactive substances:	Not applicable
Pyrophoric liquids:	Not applicable.
Pyrophoric solids:	Not applicable.
Self-heating substances:	Not applicable
Oxidising liquids:	Not applicable
Oxidising solids:	Not applicable
Organic peroxides:	Not applicable
Metal corrosion:	Not applicable

## **SECTION 10: Stability and reactivity**

### 10.1 Reactivity:

Both wet clay and hardened clay are stable.

### 10.2 Chemical stability:

The product is chemically stable.

### 10.3 Possible hazardous reactions:

The clay product contains components that react with strong acids such as hydrochloric acid and sulphuric acid, possibly causing some heat generation.

### 10.4 Conditions to avoid:

Store wet clay in the sealed plastic bag to prevent premature hardening.

Avoid temperatures higher than 93°C.

### 10.5 Chemically interacting materials:

Avoid strong acids, strong bases and all chemicals that can react with clay.

### 10.6 Hazardous decomposition products:

Will probably not dissolve.

Rather dissolves in a liquid mixture of inorganic salts.

According to directive 1907/2006/EC, 2020/878

Page: Page 12 from 16

Version 3.0

Revision date: 22-09-2022

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

**SECTION 11: Toxicological information****11.1 Information on toxicological effects:**

No information on the mixture. Information on the ingredients is given below.

**Animal toxicity:**

Component	Acute	test value	Species
Wet clay product	Draize test – eyes	Lightly irritant	Cog
Wet clay product	Draize test - skin>	2000 mg/kg (non-irritant)	Rabbit
Copper sulphate pentahydrate	LD50 oral	481-482 mg/kg body weight	Rat
Copper sulphate pentahydrate	LD50 dermal	2000 mg/kg body weight	Rat
Talc	LD50 oral	3870 - 5000 mg/kg body weight	Rat
Talc	LC50 4 hours	2.1 mg/l	Rat
Talc	LD50 dermal	2000 mg/kg body weight	Rat
Titanium dioxide	LD50 oral	2000 - 2500 mg/kg body weight	Rat
Titanium dioxide	LC50 4 hours	3.43 - 6.82 mg/l	Rat
Kaolin	LD50 oral	>5000 mg/kg	Rat
Kaolin	LD50 dermal	>5000 mg/kg	Rat
Sodium 2-biphenylate	LD50 oral	846 mg/kg body weight	Rat
Sodium 2-biphenylate	LD50 dermal	2000 mg/kg body weight	Rat

**Other information:****Skin corrosion/irritation:**

Wet clay can dry out and irritate unprotected skin.

**Eye damage/irritation:**

Several of the ingredients have been identified as potential eye irritants.

Eye irritation is most likely if the wet product gets into the eye by rubbing it or during sanding of the cured final product.

**Carcinogenicity:**

Quartz has been identified as a respiratory carcinogen - IRAC Group I carcinogen; National Toxicology Program (9th report) lists respirable crystalline silica as "Known to be a Human Carcinogen".

This applies to the cured product and possible exposure to airborne quartz (silica) containing dust.

The degree of abrasion is unlikely to produce measurable exposure to crystalline silica.

**Endocrine disruptors:**

The ingredients have not been identified as endocrine disruptors.

**Symptoms related to physical, chemical and toxicological characteristics****In case of ingestion:**

Ingestion of clay products can lead to digestive constipation.

**On contact with skin:**

Repeated handling of the wet clay with bare hands can cause dehydration and redness.

**In case of inhalation:**

Only an exposure route if the cured product is sanded.

The size of the finished pieces is not expected to be large enough to lead to measurable airborne dust even with machine sanding.

**On eye contact:**

Hand-to-eye transfer during processing of uncured clay may cause some eye irritation.

Dust during sanding of cured objects can cause abrasions to the eye.

**11.2 Information on other hazards****Endocrine-disrupting properties**

Product:

Assessment:

The substance/mixture does not contain components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

**Further information**

Product:

Notes:

According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 13 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

No data available

**SECTION 12: Ecological information****12.1 Toxicity:**

Aquatic toxicity - applicable to Part A in uncured form.

Component	Animal	Test	Result
Copper sulphate	Fish	LC50 - 4 days	2.8 - 9150 mg/l
Copper sulphate	Fish	LC50 - 48 hours	5.9 - 30.2 mg/l
Copper sulphate	Fish	NOEC - 4 days	12.2 - 29.2 mg/l
Copper sulphate	Fish	NOEC - 11 months	14.5 - 33 mg/l
Copper sulphate	Invertebrate aquatic animals	EC50 - 4 days	5 - 42 mg/l
Copper sulphate	Invertebrate aquatic animals	EC50 - 48 hours	1 - 1213 mg/l
Copper sulphate	Invertebrate aquatic animals	EC50 - 24 hours	12 - 23.8 mg/l
Copper sulphate	Invertebrate aquatic animals	NOEC - 8 months	8.3 - 13.8 mg/l
Copper sulphate	Aquatic algae and cyanobacteria	EC50 - 10 days	32 mg/l
Copper sulphate	Aquatic algae and cyanobacteria	EC50 - 72 hours	16.5 - 987 mg/l
Sodium 2-biphenylate	Fish	LC50 - 4 days	2.6 - 5.1 mg/l
Sodium 2-biphenylate	Fish	NOEC - 4 days	1.1 - 3.3 mg/l
Sodium 2-biphenylate	Fish	NOEC - 21 days	36 mg/l
Sodium 2-biphenylate	Invertebrates	LC50 - 48 hours	2.7 mg/l
Sodium 2-biphenylate	Invertebrate aquatic animals	NOEC - 48 hours	780 mg/l
Sodium 2-biphenylate	Invertebrate aquatic animals	NOEC - 21 days	9 mg/l
Sodium 2-biphenylate	Aquatic algae and cyanobacteria	EC50 - 4 days	1.32 - 3.78 mg/l
Sodium 2-biphenylate	Aquatic algae and cyanobacteria	NOEC - 4 days	432 mg/l
Sodium 2-biphenylate	Microorganisms	LC50 - 14 days	198.2 mg/kg

**12.2 Persistence and degradability:**

Both copper sulphate and sodium biphenylate present in the clay.

These ingredients have biocidal properties and affect the environment when the clay is in its "wet" state, but are both biodegradable.

As the clay cures, these components are no longer available to the environment.

**12.3 Bioaccumulation:**

No further information available.

**12.4 Mobility in soil:**

No further information available.

**12.5 Results of PBT and vPvB assessment**

This substance does not meet the criteria for classification as PBT or vPvB.

**12.6 Endocrine disrupting properties**

Product:

Assessment:

The substance/mixture does not contain components believed to have endocrine-disrupting properties according to REACH article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at level 0.1% or higher.

**12.7 Other adverse effects:**

No further information available.

**SECTION 13: Instructions for disposal****13.1 Waste treatment methods:****For intended use:**

The wet clay deemed unusable can solidify by curing and be disposed of as regular waste.

**After intended use:**

The product is used in the production of clay objects.

No removal expected.

Cured material can be disposed of as ordinary waste.

# SAFETY DATA SHEET



According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 14 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

## **SECTION 14: Transport information**

### 14.1 UN number

Transport of this substance is not subject to regulations.

### 14.2 Proper designation of cargo according to UN model regulations

Transport of this substance is not subject to regulations.

### 14.3 Transport hazard class(es)

Transport of this substance is not subject to regulations.

### 14.4 Packing group

Transport of this substance is not subject to regulations.

### 14.5 Environmental hazards

Transport of this substance is not subject to regulations.

### 14.6 Special precautions for the user

Notes:

The transport of dangerous goods, including loading and unloading, must be carried out in accordance with regulations by personnel who have received the necessary training;

The transport classification(s) given herein are for information only, and based solely on the properties of the unpackaged material as described in this safety data sheet. Transport classifications may vary with respect to mode of transport, size of packaging and variations in regional or national regulations.

### 14.7 Sea transport in bulk in accordance with IMO instruments

Not applicable for product, as delivered.

## **SECTION 15: Statutory information**

### 15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture:

#### **Chemical inventory status:**

Ingredients listed on: TSCA, DSL, Japan and EC inventories.

#### **EU regulations:**

##### **Chemical Agents Directive - Article 2(b)(i)**

Copper sulphate, sodium 2-biphenylate

##### **Construction products regulation - Annex I, point 3 - Hazardous substances**

Copper sulphate, sodium 2-biphenylate

##### **End-of-life vehicles directive - 2000/53/EC Article 2(11)**

Copper sulphate, sodium 2-biphenylate

##### **EU Ecolabel Regulation**

Copper sulphate, sodium 2-biphenylate

##### **Marine environment framework directive**

Copper sulphate, sodium 2-biphenylate

##### **WFD - Waste Framework Directive**

Copper sulphate, sodium 2-biphenylate

##### **Regulation on recycled plastic food contact materials and articles - list of Annex I materials whose use is permitted in the EU under Regulation 10/2011/EU.**

No

##### **Germany - Water hazard class (WGK)**

WGK 3

### 15.2 Chemical safety assessment:

No chemical safety assessment has been carried out.

## **SECTION 16: Other information**

### **Full text of the H statements**

H350 - May cause cancer by inhalation of cured product dust.

H372 - Causes respiratory damage by prolonged exposure to airborne silica dust.

H320 - Causes eye irritation.

H315 - Causes skin irritation.

# SAFETY DATA SHEET



According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 15 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

H412 - Harmful to aquatic life with long lasting effects.

H411 - Toxic to aquatic organisms with long-lasting effects.

## Full text of other abbreviations

Acute Tox..:	Acute Toxicity
Aquatic Acute:	Short-term (Acute) Aquatic hazard
Aquatic Chronic:	Chronic aquatic toxicity
Carc. :	Carcinogenicity
Eye damage:	Serious eye damage
Eye irritation:	Eye irritation
Resp. Irrit:	Respiratory irritation
Resp. Sens..:	Respiratory sensitisation
Skin irritation:	Skin corrosion/irritation
STOT RE:	Specific target organ toxicity - repeated exposure
STOT SE:	Specific target organ toxicity - single exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - body weight; CLP - Classification, Labelling and Packaging Regulation; Regulation (EC) no. 1272/2008; CMR - Carcinogenic, mutagenic or toxic to reproduction; DIN - Standard of the German Institute for Standardisation; DSL - List of Indoor Substances (Canada); ECHA - European Chemicals Agency; EC number - EINECS number; ECx - Concentration associated with x% response; ELx - Charge associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemicals (Japan); ErCx - Concentration associated with x% growth response; GHS - Globally Harmonised System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - IMO International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk; IC50 - Half-Maximum Inhibitory Concentration; ICAO - International Civil Aviation Organisation; IECSC - Inventory List of Existing Chemicals in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organisation; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardisation; KECI - Korean Inventory of Existing Chemicals; LC50 - lethal concentration for 50% of a test population; LD50 - lethal dose for 50% of a test population (lethal dose median); MARPOL - International Convention for the Prevention of Pollution from Ships; n.. o.s.. - Not otherwise specified; NO(A)EC - No observed (negative) effect on concentration; NO(A)EL - No observed (negative) effect on Level; NOELR - No observed effect on cargo capacity; NZIoC - New Zealand Inventory of Chemicals; OECD - Organisation for Economic Co-operation and Development OECD; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, bioaccumulative and toxic substance; PICCS - Philippine Inventory of Chemicals and Chemicals; (Q)SAR - (Quantitative) Structure-Activity Relationships; REACH - Regulation (EC) no. 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwanese Chemical Substances Inventory; TECl - Thailand Chemical Substances Inventory; TRGS - Technical Regulations on Hazardous Substances; TSCA - Toxic Substances Control Act (USA); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative.

## Further information

Training advice:

Provide proper information, instruction and training for users.

## Classification of the preparation:

STOT RE 1	H372
Aquatic Acute 3	H400

## Classification procedure:

Calculation method
Calculation method

# SAFETY DATA SHEET



According to directive 1907/2006/EC, 2020/878

Version 3.0

Revision date: 22-09-2022

Page: Page 16 from 16

Print date: 13-10-2022

Trade name: Critter Clay™ - all colours; Air Fire Clay™

The information in this safety data sheet is correct to the best of our knowledge at the date of issue indicated. This information is for guidance on safe handling, use, processing, storage, transportation, disposal and release only and should not be considered a guarantee or indication of quality.