

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)

Trade name : METAFLUX 70-38 Galva Protect  
Revision date : 10.06.2021  
Print date : 10.06.2021

Version (Revision) : 5.0.1 (5.0.0)

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

#### 1.1 Product identifier

METAFLUX 70-38 Galva Protect

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

##### Relevant identified uses

Coatings and paints, fillers, putties, thinners

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

##### Supplier (manufacturer/importer/only representative/downstream user/distributor)

Techno-Service GmbH

Street : Detmolder Str. 515

Postal code/city : D-33605 Bielefeld

Telephone : +49 521 92444 0

Telefax : +49 521 207432

Information contact : verkauf@metaflux.de

#### 1.4 Emergency telephone number

+49 70024112112 or +1 872 5888271 (TSF) 24h

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Chronic 3 ; Harmful to aquatic life with long lasting effects.

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

###### Hazard statements

H412 Harmful to aquatic life with long lasting effects.

###### Precautionary statements

P273 Avoid release to the environment.

P391 Collect spillage.

#### 2.3 Other hazards

None

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

##### Hazardous ingredients

TRIS(2-ETHYLHEXYL) PHOSPHATE ; REACH No. : 01-2119517575-36-XXXX ; EC No. : 201-116-6; CAS No. : 78-42-2

Weight fraction :  $\geq 1 - < 5$  %

Classification 1272/2008 [CLP] : Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319

TRIZINC BIS(ORTHOPHOSPHATE) ; REACH No. : 01-2119485044-40-XXXX ; EC No. : 231-944-3; CAS No. : 7779-90-0

Weight fraction :  $\geq 1 - < 2,5$  %

Classification 1272/2008 [CLP] : Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

ZINC OXIDE ; REACH No. : 01-2119463881-32-XXXX ; EC No. : 215-222-5; CAS No. : 1314-13-2

Weight fraction :  $\geq 0,25 - < 0,5$  %

Classification 1272/2008 [CLP] : Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

##### Further ingredients

TITANIUM DIOXIDE ; REACH No. : 01-2119489379-17-XXXX ; EC No. : 236-675-5; CAS No. : 13463-67-7

Weight fraction :  $\geq 5 - < 10$  %

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### Additional information

Full text of H- and EUH-phrases: see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

When in doubt or if symptoms are observed, get medical advice.

#### Following inhalation

Remove casualty to fresh air and keep warm and at rest.

#### In case of skin contact

In case of skin irritation, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye.

#### After ingestion

Rinse mouth immediately and drink plenty of water.

### 4.2 Most important symptoms and effects, both acute and delayed

No information available.

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

None

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

Foam , Extinguishing powder , Carbon dioxide (CO<sub>2</sub>) , Sand , Nitrogen , Extinguishing blanket

### 5.2 Special hazards arising from the substance or mixture

None

### 5.3 Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

### 5.4 Additional information

Move undamaged containers from immediate hazard area if it can be done safely. The product itself does not burn. Coordinate fire-fighting measures to the fire surroundings.

## SECTION 6: Accidental release measures

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

None

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. No special environmental measures are necessary.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Treat the recovered material as prescribed in the section on waste disposal.

### 6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

## SECTION 7: Handling and storage

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### 7.1 Precautions for safe handling

Keep container tightly closed. Keep/Store only in original container.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Store in a cool dry place.

#### Hints on joint storage

Storage class (TRGS 510) : 12

### 7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limit values

TITANIUM DIOXIDE ; CAS No. : 13463-67-7

Limit value type (country of origin) : STEL ( D )

Parameter : A: respirable fraction

Limit value : 2,4 mg/m<sup>3</sup>

Remark : 15 min. average, except fine part./dens.

Version : 25.02.2021

Limit value type (country of origin) : TWA ( D )

Parameter : A: respirable fraction

Limit value : 0,3 mg/m<sup>3</sup>

Remark : DFG; except ultrafine part., density

Version : 25.02.2021

#### DNEL-/PNEC-values

##### DNEL/DMEL

Limit value type : DNEL worker (systemic) ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )

Exposure route : Inhalation

Exposure frequency : Long-term

Limit value : 350 mg/m<sup>3</sup>

Limit value type : DNEL worker (systemic) ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )

Exposure route : Inhalation

Exposure frequency : Short-term

Limit value : 2800 mg/m<sup>3</sup>

Limit value type : DNEL worker (systemic) ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )

Exposure route : Dermal

Exposure frequency : Long-term

Limit value : 50 mg/kg

Limit value type : DNEL worker (systemic) ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )

Exposure route : Dermal

Exposure frequency : Short-term

Limit value : 400 mg/kg

##### PNEC

Limit value type : PNEC (Aquatic, freshwater) ( ZINC OXIDE ; CAS No. : 1314-13-2 )

Exposure route : Water (Including sewage plant)

Limit value : 20,6 µg/l

Limit value type : PNEC (Aquatic, marine water) ( ZINC OXIDE ; CAS No. : 1314-13-2 )

Exposure route : Water (Including sewage plant)

Limit value : 6,1 µg/l

Limit value type : PNEC (Sediment, freshwater) ( ZINC OXIDE ; CAS No. : 1314-13-2 )

Limit value : 117,8 mg/kg

Limit value type : PNEC (Sediment, marine water) ( ZINC OXIDE ; CAS No. : 1314-13-2 )

Limit value : 56,5 mg/kg

Limit value type : PNEC (Sewage treatment plant) ( ZINC OXIDE ; CAS No. : 1314-13-2 )

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Exposure route : Water (Including sewage plant)  
Limit value : 52 µg/l

### 8.2 Exposure controls

#### Personal protection equipment

##### Eye/face protection



Wear suitable safety goggles in case of splash.

##### Suitable eye protection

EN 166.

##### Skin protection

##### Hand protection



Suitable gloves type : EN 374.

Suitable material : CR (polychloroprene, chloroprene rubber) / NBR (Nitrile rubber)

Breakthrough time (maximum wearing time) : 120 min. / 480 min.

Thickness of the glove material : 0.8 mm. /

Remark : The exact break trough time has to be requested from the protective glove manufacturer and limits has to be ensured.

##### Respiratory protection



Respiratory protection necessary at: exceeding exposure limit values

##### Suitable respiratory protection apparatus

Combination filtering device (EN 14387)

##### Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

##### General information

Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Wash hands before breaks and after work.

### 8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

Physical state : solid

Colour : red

#### Odour

odourless

#### Safety characteristics

Initial boiling point and boiling range : ( 1013 hPa ) approx. 120 °C

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Flash point :		not applicable
Lower explosion limit :		not applicable
Upper explosion limit :		not applicable
Vapour pressure :	( 50 °C )	not applicable
Density :	( 20 °C ) approx.	1,6 g/cm <sup>3</sup>
pH :		not applicable
Maximum VOC content (EC) :		3 Wt %
Maximum VOC content (Switzerland) :		3 Wt %

### 9.2 Other information

None

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

### 10.2 Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

### 10.3 Possibility of hazardous reactions

No information available.

### 10.4 Conditions to avoid

No information available.

### 10.5 Incompatible materials

No information available.

### 10.6 Hazardous decomposition products

Decomposition products in case of fire: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

##### Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	> 2000 mg/kg
Parameter :	LD50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg
Method :	OECD 401
Parameter :	LD50 ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )
Exposure route :	Oral
Species :	Rat
Effective dose :	> 2000 mg/kg
Method :	OECD 401

##### Acute dermal toxicity

Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	> 2000 mg/kg
Parameter :	LD50 ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	18400 mg/kg

##### Acute inhalation toxicity

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Parameter : ATEmix calculated  
Exposure route : Inhalation  
Effective dose : > 20 mg/m<sup>3</sup>  
Parameter : LC50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : > 5,7 mg/l  
Exposure time : 4 h  
Method : OECD 403  
Parameter : LC50 ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )  
Exposure route : Inhalation  
Species : Rat  
Effective dose : > 447 mg/m<sup>3</sup>  
Exposure time : 4 h

### Corrosion

#### Skin corrosion/irritation

No further relevant information available.

#### Serious eye damage/eye irritation

No further relevant information available.

### Respiratory or skin sensitisation

#### Skin sensitisation

No further relevant information available.

#### Sensitisation to the respiratory tract

No further relevant information available.

### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

#### Carcinogenicity

No further relevant information available.

#### Germ cell mutagenicity

No further relevant information available.

#### Reproductive toxicity

No further relevant information available.

### STOT-single exposure

No further relevant information available.

### STOT-repeated exposure

No further relevant information available.

### Aspiration hazard

No further relevant information available.

### 11.2 Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

### 11.3 Other adverse effects

May be absorbed through the skin. Frequently or prolonged contact with skin may cause dermal irritation.

### 11.4 Additional information

Mixture not tested. The statement is derived from the properties of the single components.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

##### Acute (short-term) fish toxicity

Parameter : LC50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Species : Oncorhynchus mykiss (Rainbow trout)  
Evaluation parameter : Acute (short-term) fish toxicity  
Effective dose : 0,169 - 2,17 mg/l  
Exposure time : 96 h

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Parameter : LC50 ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )  
Species : Fish  
Evaluation parameter : Acute (short-term) fish toxicity  
Effective dose : > 500 mg/l  
Exposure time : 48 h

### Chronic (long-term) fish toxicity

Parameter : NOEC ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Species : Oncorhynchus mykiss (Rainbow trout)  
Evaluation parameter : Chronic (long-term) fish toxicity  
Effective dose : 0,199 mg/l  
Exposure time : 30 D  
Method : OECD 215

### Acute (short-term) toxicity to crustacea

Parameter : EC50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Species : Daphnia magna (Big water flea)  
Evaluation parameter : Chronic (long-term) daphnia toxicity  
Effective dose : 0,86 mg/l  
Exposure time : 48 h

Parameter : EC50 ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )  
Species : Daphnia magna (Big water flea)  
Evaluation parameter : Acute (short-term) daphnia toxicity  
Effective dose : > 0,08 - 1 mg/l  
Exposure time : 48 h  
Method : Regulation (EC) No. 440/2008, Annex, C.2

### Chronic (long-term) toxicity to crustacea

Parameter : NOEC ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Species : Daphnia magna (Big water flea)  
Evaluation parameter : Chronic (long-term) daphnia toxicity  
Effective dose : 0,031 - 0,208 mg/l  
Exposure time : 50 D

### Acute (short-term) toxicity to aquatic algae and cyanobacteria

Parameter : EC50 ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )  
Species : Desmodesmus subspicatus  
Evaluation parameter : Acute (short-term) algae toxicity  
Effective dose : > 0,876 mg/l  
Exposure time : 72 h  
Method : OECD 201

### Chronic (long-term) algae toxicity

Parameter : NOEC ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Species : Pseudokirchneriella subcapitata  
Evaluation parameter : Chronic (long-term) algae toxicity  
Effective dose : 0,05 mg/l  
Exposure time : 3 D  
Method : OECD 201

### Toxicity to microorganisms

Parameter : EC50 ( TRIZINC BIS(ORTHOPHOSPHATE) ; CAS No. : 7779-90-0 )  
Species : Bacteria toxicity  
Effective dose : 5,2 mg/l  
Exposure time : 3 h  
Method : OECD 209

Parameter : EC50 ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )  
Species : Bacteria toxicity  
Effective dose : 10 mg/l  
Exposure time : 24 h

## 12.2 Persistence and degradability

### Biodegradation

Parameter : Biodegradation ( TRIS(2-ETHYLHEXYL) PHOSPHATE ; CAS No. : 78-42-2 )

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Inoculum : Biodegradation  
Degradation rate : 0 %  
Test duration : 28 D  
Evaluation : Poorly biodegradable.  
Method : OECD 301C

### 12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6 Other adverse effects

No information available.

### 12.7 Additional ecotoxicological information

Discharge into the environment must be avoided.

## SECTION 13: Disposal considerations

The waste codes are recommendations based on the schedule use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances.

### 13.1 Waste treatment methods

#### Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

#### Waste code product

08 01 12 - Waste paint and varnish other than those mentioned in 08 01 11.

#### Waste code packaging

15 01 02 - plastic packaging.

### 13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

## SECTION 14: Transport information

### 14.1 UN number

No dangerous good in sense of these transport regulations.

### 14.2 UN proper shipping name

No dangerous good in sense of these transport regulations.

### 14.3 Transport hazard class(es)

No dangerous good in sense of these transport regulations.

### 14.4 Packing group

No dangerous good in sense of these transport regulations.

### 14.5 Environmental hazards

No dangerous good in sense of these transport regulations.

### 14.6 Special precautions for user

None

## SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use



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### Restrictions on use

Use restriction according to REACH annex XVII, no. : 3

### Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

### National regulations

#### Technische Anleitung Luft (TA-Luft)

Weight fraction (Number 5.2.5. I) : < 5 %

#### Water hazard class (WGK)

Classification according to AwSV - Class : 2 (Obviously hazardous to water)

## 15.2 Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

## SECTION 16: Other information

### 16.1 Indication of changes

None

### 16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europäisches Übereinkommen über die Beförderung gefährlicher Güter auf der Straße)

AOX: adsorbierbare organisch gebundene Halogene

AwSV: Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen

CAS: Chemical Abstracts Service (Unterabteilung der American Chemical Society)

CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen (Classification Labelling and Packaging)

EAK / AVV: europäischer Abfallartenkatalog / Abfallverzeichnis-Verordnung

ECHA: Europäische Chemikalienagentur (European Chemicals Agency)

EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances)

GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System of Classification and Labelling of Chemicals)

IATA: Internationale Luftverkehrs-Vereinigung (International Air Transport Association)

ICAO: Internationale Zivilluftfahrtorganisation (International Civil Aviation Organization)

IMDG: Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous Goods)

RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le transport international ferroviaire de marchandises dangereuses)

TRGS: Technische Regel für den Umgang mit Gefahrstoffen

VbF: Verordnung über brennbare Flüssigkeiten

VOC: flüchtige organische Verbindung (volatile organic compound)

VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe

WGK: Wassergefährdungsklasse

### 16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank

ECHA: Classification And Labelling Inventory

ECHA: Pre-registered Substances

ECHA: Registered Substances

EC\_Safety Data Sheet of Suppliers

ESIS: European Chemical Substances Information System

GDL: Gefahrstoffdatenbank der Länder

UBA Rigoletto: Wassergefährdende Stoffe

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

### 16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

No information available.

### 16.5 Relevant H- and EUH-phrases (Number and full text)

H315 Causes skin irritation.

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H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### 16.6 Training advice

None

### 16.7 Additional information

None

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The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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