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

1.1 Product identifier

Trade name

KRONES creadditive FIL 16 01

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

Relevant identified uses of the substance or mixture 3D Printing

Reserved for industrial use

Uses advised against pharmaceuticals Medical equipment

1.3 Details of the supplier of the safety data sheet

Address

KIC KRONES Internationale Cooperationsgesellschaft mbH Böhmerwaldstraße 5 93073 Neutraubling

Telephone no.+49 9401 70-3020e-mailkic@kic-krones.com

1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord) In case of transport incidents and other emergencies: +44 (0) 1235 239 670 (NCEC, National Chemical Emergency Centre)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP. This product does not meet the classification criteria given in the Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms

Signal word

Hazard statement(s)

-

EUH212

Hazard statements (EU) EUH210

Safety data sheet available on request. Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

Precautionary statement(s)

Labelling information

The labelling (EU hazard statements) meets the criteria of annex II of Directive (EC) Nr. 1272/2008 (CLP).

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2.3 Other hazards

Curren

This product does not contain components considered 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 levels of 0.1% or higher.

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index /	Classification (EC) 1272/2008 (CLP)	Concentration	%
	REACH no			
1	titanium dioxide; [i	n powder form containing 1 % or more of		
	particles with aero	dynamic diameter ≤ 10 μm]		
	13463-67-7	Carc. 2; H351i	0,10 - < 1,00	wt%
	236-675-5			
	022-006-00-2			
	-			

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	V. W. 10	-	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

No Route, target organ, concrete effect 1 H351i inhalational; -;

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact

In case of contact with skin wash off with water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion

Seek medical advice if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed No data available.

4.3 Indication of any immediate medical attention and special treatment needed

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Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Water spray jet; Dry chemical extinguisher; Foam Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture In the event of fire, the following can be released: Flue gases

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8.

For emergency responders Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Collect mechanically. When collected, handle material as described under the section heading "Disposal considerations". Avoid raising dust.

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale dust. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

Stoarge Class according TRGS 510

Non-combustible solids that cannot be assigned to any of the above storage classes

7.3 Specific end use(s)

13

No data available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

No parameters available for monitoring.

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation	
solid	
Form	
Thermoplastic filament	
Colour	
various colour shades	
Odour	
characteristic	
pH value	
No data available	
Boiling point / boiling range	
No data available	
Melting point/freezing point	
No data available	
Decomposition temperature	
No data available	
Flash point	
No data available	
Ignition temperature	
No data available	

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Flammability not flammable Lower explosion limit No data available **Upper explosion limit** No data available Vapour pressure No data available **Relative vapour density** No data available **Relative density** No data available Density No data available Solubility No data available Partition coefficient n-octanol/water (log value) No data available **Kinematic viscosity** No data available **Particle characteristics** No data available

9.2 Other information

Other information

No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid No data available.

- **10.5** Incompatible materials No data available.
- **10.6 Hazardous decomposition products** No data available.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

No data available Acute dermal toxicity	
Acute dermal toxicity	
Acute definal toxicity	
No data available	

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No data available	
Skin corrosion/irritation	
No data available	
Serious eye damage/irritation	
No data available	
Respiratory or skin sensitisation	
No data available	
Germ cell mutagenicity	
No data available	
Reproduction toxicity	
No data available	
Carcinogenicity	
No data available	
STOT - single exposure	
No data available	
STOT - repeated exposure	
No data available	
Aspiration hazard	
No data available	
1.2 Information on other hazards	
Endocrine disrupting properties No data available.	

Other information

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)	
No data available	
Toxicity to fish (chronic)	
No data available	
Toxicity to Daphnia (acute)	
No data available	
Toxicity to Daphnia (chronic)	
No data available	
Toxicity to algae (acute)	
No data available	
Toxicity to algae (chronic)	
No data available	
Bacteria toxicity	
No data available	

12.2 Persistence and degradability No data available.

- **12.3 Bioaccumulative potential** No data available.
- **12.4 Mobility in soil** No data available.

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12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	According to the information provided in the supply chain, the mixture
	does not contain $> 0.1\%$ of a substance that is considered to be PBT.
vPvB assessment	According to the information provided in the supply chain, the mixture
	does not contain > 0.1% of a substance that is considered to be
	vPvB.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Other information

Other information Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2 UN proper shipping name

Not classified as dangerous in the meaning of transport regulations.

14.3 Transport hazard class(es)

Not classified as dangerous in the meaning of transport regulations.

- **14.4 Packing group** Not classified as dangerous in the meaning of transport regulations.
- **14.5** Environmental hazards Not classified as dangerous in the meaning of transport regulations.
- **14.6** Special precautions for user No data available.
- 14.7 Maritime transport in bulk according to IMO instruments Not relevant

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU regulations</u>

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

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According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10	13463-67-7	236-675-5	75
	μm]			

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances This product is not subject to Part 1 or 2 of Annex I.

Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

National regulations

Water Hazard Class (Germany)

Class Source nwg Classification according to AwSV (Regulation on facilities for handling substances that are hazardous to water).

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H351i Suspected of causing cancer by inhalation.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)

V If the substance is to be placed on the market as µm and aspect ratio ≥ 3:1) or particles of the sul as particles with modified surface chemistry, the in accordance with Title II of this Regulation, to a 1B or 1A) and/or additional routes of exposure (ir hazardous properties must be evaluated assess whether a higher category (Carc.
W It has been observed that the carcinogenic haza respirable dust is inhaled in quantities leading to clearance mechanisms in the lung.	
This note aims to describe the particular toxicity criterion for classification according to this Regu	
1 The concentration stated or, in the absence of s concentrations of this Regulation (Table 3.1) or t 1999/45/EC (Table 3.2), are the percentages by with reference to the total weight of the mixture.	the generic concentrations of Directive weight of the metallic element calculated

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Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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