

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC**

Revision date: 11.11.2022

Product code: 102-001

Page 1 of 9

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC

**Further trade names**

Article No.: 100-500-00, 102-001-10, 102-200-10, 102-250-00, 102-280-00, 102-600-01, 102-600-02, 102-600-10, 102-601-10, 102-602-10, 102-610-00, 102-611-00, 102-612-00, 102-620-00, 102-621-00, 102-622-00, 102-630-00, 102-631-00, 102-632-00, 102-640-00, 102-641-00, 102-642-00

Product group: Zulieferprodukt

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Health services.

**1.3. Details of the supplier of the safety data sheet**

Company name:	DENTAURUM GmbH & Co. KG	
Street:	Turnstr. 31	
Place:	D-75228 Ispringen	
Telephone:	+49 7231 803 0	Telefax: +49 7231 803 295
e-mail:	info@dentaurum.de	
Contact person:	Chemie	
Internet:	www.dentaurum.com	

**1.4. Emergency telephone number:** 07:00 - 18:00 (Mo - Fr) +49 7231 803 0**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**Resp. Sens. 1; H334  
Skin Sens. 1; H317  
Muta. 2; H341  
Carc. 1B; H350  
Repr. 1B; H360F  
Aquatic Chronic 4; H413

Full text of hazard statements: see SECTION 16.

Compact metal/alloy without hazards for human health or environment

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard components for labelling**

cobalt

**Signal word:** Danger**Pictograms:****Hazard statements**

H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC**

Revision date: 11.11.2022

Product code: 102-001

Page 2 of 9

H350 May cause cancer.  
 H360F May damage fertility.  
 H413 May cause long lasting harmful effects to aquatic life.

**Precautionary statements**

P201 Obtain special instructions before use.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P308+P313 IF exposed or concerned: Get medical advice/attention.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

**Additional advice on labelling**

For this product, a hazard label is not required according to section 1.3.4 of Annex I of the CLP regulation.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients**
**3.2. Mixtures**
**Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7440-48-4	cobalt			30-70 %
	231-158-0	027-001-00-9		
	Carc. 1B, Muta. 2, Repr. 1B, Resp. Sens. 1, Skin Sens. 1, Aquatic Chronic 4; H350 H341 H360F H334 H317 H413			
7440-47-3	Chromium			20-40 %
7439-98-7	Molybdenum			4-10 %

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7440-48-4	231-158-0	cobalt	30-70 %
	oral: LD50 = 6170 mg/kg		

**Further Information**

Remanium Star Ingredient (name): cobalt,

**SECTION 4: First aid measures**
**4.1. Description of first aid measures**
**After inhalation**

Provide fresh air. Inhalation of dust/particles: Remove casualty to fresh air and keep warm and at rest.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. After contact with molten product, cool skin area rapidly with cold water.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC**

Revision date: 11.11.2022

Product code: 102-001

Page 3 of 9

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

Rinse mouth immediately and drink 1 glass 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**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

**5.2. Special hazards arising from the substance or mixture**

Non-flammable.

**5.3. Advice 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****General advice**

Avoid dust formation.

**6.2. Environmental precautions**

No special environmental measures are necessary. Clean contaminated articles and floor according to the environmental legislation.

**6.3. Methods and material for containment and cleaning up****Other information**

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Avoid dust formation.

**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****7.1. Precautions for safe handling****Advice on safe handling**

No special measures are necessary.

**Advice on protection against fire and explosion**

Avoid dust formation.

**Advice on general occupational hygiene**

Take off contaminated clothing. Wash hands before breaks and after work. Do not breathe dust. Do not eat, drink or smoke when using this product.

Caution! Hot molten mass. Conditions to avoid: Skin contact

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. No special measures are necessary.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC**

Revision date: 11.11.2022

Product code: 102-001

Page 4 of 9

**Hints on joint storage**

No special measures are necessary.

**7.3. Specific end use(s)**

Health services.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
7440-47-3	Chromium metal	-	2		TWA (8 h)	
7440-48-4	Cobalt	-	0.02		TWA (8 h)	
-	Molybdenum soluble compounds (as Mo, CAS 7439-98-7, EINECS 231-107-2) (Respirable Fraction)	-	0.5		TWA (8 h)	

**Biological limit values**

CAS No	Substance	Parameter	Value	Test material	Sampling time
7440-48-4	Cobalt	Cobalt	1 µg/L	Blood	End of shift at end of workweek
7440-47-3	Chromium	Total chromium	25 µg/L	Urine	End of shift at end of workweek

**8.2. Exposure controls**

**Individual protection measures, such as personal protective equipment**
**Eye/face protection**

Wear eye/face protection.

**Hand protection**

Recommendation:

Dermatril 740 Single-use gloves. NBR (Nitrile rubber). 0,11 mm

penetration time (maximum wearing period): 480 min.

REF 162-907-00 (7/S), REF 162-908-00 (8/M), REF 162-909-00 (9/L)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Use of protective clothing

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Respiratory protection necessary at: In the case of the formation of dust.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC

Revision date: 11.11.2022

Product code: 102-001

Page 5 of 9

## SECTION 9: Physical and chemical properties

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

Physical state:	Pellets
Colour:	silver grey
Odour:	odourless
Odour threshold:	not applicable

#### Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	not applicable

#### Flammability

Solid/liquid:	not determined
Gas:	not applicable

#### Explosive properties

Not dust explosive

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined

#### Self-ignition temperature

Solid:	not determined
Gas:	not applicable

Decomposition temperature: not determined

pH-Value: not determined

Viscosity / dynamic: not determined

Viscosity / kinematic: not determined

Flow time: not determined

Water solubility: insoluble

#### Solubility in other solvents

not determined

Partition coefficient n-octanol/water: not determined

Vapour pressure: not determined

Vapour pressure: not determined

 Density: 8 g/cm<sup>3</sup>

Bulk density: not determined

Relative vapour density: not determined

### 9.2. Other information

Sustaining combustion: No data available

Oxidizing properties

Not oxidising.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC**

Revision date: 11.11.2022

Product code: 102-001

Page 6 of 9

Solid content: 100,00 %  
 Evaporation rate: not determined

**Further Information**
**SECTION 10: Stability and reactivity**
**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

No risks worthy of mention.

**10.4. Conditions to avoid**

none

**10.5. Incompatible materials**

No information available.

**10.6. Hazardous decomposition products**

none

**SECTION 11: Toxicological information**
**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**
**Acute toxicity**

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
7440-48-4	cobalt					
	oral	LD50 mg/kg	6170	Rat	GESTIS	

**Additional information on tests**

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

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

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

**Other information**

Health hazards: none

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

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7440-48-4	cobalt					
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Brachydanio rerio	

**12.2. Persistence and degradability**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC**

Revision date: 11.11.2022

Product code: 102-001

Page 7 of 9

The product has not been tested.

**12.3. Bioaccumulative potential**

The product has not been tested.

**12.4. Mobility in soil**

The product has not been tested.

**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.

The product has not been tested.

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment.

Solubility in water (g/l): The study does not need to be conducted because the substance is known to be insoluble in water.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Dispose of waste according to applicable legislation.

**Contaminated packaging**

Wash with plenty of water. Completely emptied packages can be recycled.

**SECTION 14: Transport information****Land transport (ADR/RID)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Inland waterways transport (ADN)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Marine transport (IMDG)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**Air transport (ICAO-TI/IATA-DGR)****14.1. UN number or ID number:**

No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:**

No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):**

No dangerous good in sense of this transport regulation.

**14.4. Packing group:**

No dangerous good in sense of this transport regulation.

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC

Revision date: 11.11.2022

Product code: 102-001

Page 8 of 9

#### 14.6. Special precautions for user

No information available.

#### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

#### **Other applicable information**

Not a hazardous material with respect to transportation regulations.

### SECTION 15: Regulatory information

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

##### **EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 28, Entry 75

##### **Additional information**

For this product, a hazard label is not required according to section 1.3.4 of Annex I of the CLP regulation.

##### **National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### **Changes**

This data sheet contains changes from the previous version in section(s): 1,8,9,11,14,15.

#### **Abbreviations and acronyms**

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

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

Classification	Classification procedure
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
Muta. 2; H341	Calculation method
Carc. 1B; H350	Calculation method
Repr. 1B; H360F	Calculation method
Aquatic Chronic 4; H413	Calculation method

#### **Relevant H and EUH statements (number and full text)**

H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360F	May damage fertility.
H413	May cause long lasting harmful effects to aquatic life.



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**remanium GM 280, 380+, 800+, 900, 2000+, 2001, star, Triloy, Secura, LFC**

Revision date: 11.11.2022

Product code: 102-001

Page 9 of 9

**Further Information**

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.

---

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*