Safety Data Sheet
according to 1907/2006/EC, Article 31

Druckdatum: 15.07.2013 überarbeitet am: 15.07.2013

1 Identification of the substance/preparation and of the company/undertaking

Product information

Trade name: inCoris CC

Company:

Sirona Dental Systems GmbH Fabrikstrasse 31

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Use of the Substance / Preparation For dental use only.

REACH Registration No.: if available listed in Chapter. 3

2 Hazards identification

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

Respiratory sensitization	Category 1	H334
Skin Sensitization	Category 1	H317
Hazardous to the aquatic environment - Chronic Hazard	Category 4	H413

Classification as per Directive 67/548/EC or Directive 1999/45/EC

R42/43: May cause sensitization by inhalation and skin contact.

R53: May cause long-term adverse effects in the aquatic environment.

GHS-Labelling

hazard-defining component(s) (GHS)

- cobalt

Symbol(s)

Signal word	Danger
Hazard statement	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317 - May cause an allergic skin reaction. H413 - May cause long lasting harmful effects to aquatic life.
Precautionary statement	P280 - Wear protective gloves/protective clothing/eye protection.

Precautionary statement: Prevention	P261 - Avoid breathing dust/fume/gas/mist/vapours/spray. P272 - Contaminated work clothing should not be allowed out of the workplace. P273 - Avoid release to the environment. P285 - In case of inadequate ventilation wear respiratory protection.
Precautionary statement: Reaction	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P302 + P352 - IF ON SKIN: Wash with plenty of soap and water. P304 + P341 - IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention. P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P363 - Wash contaminated clothing before reuse.

Other Hazards
May react forming chromium(VI) compounds when processing thermally.
May release metal vapours when melting.
Cobalt - vapour is released during processing.
Limited evidence of a carcinogenic effect.

3 Composition/information on ingredients

Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008

- **cobalt** 60% - 70%

CAS-No. 7440-48-4 EC-No. 231-158-0

Respiratory sensitization	Category 1	H334
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- **chromium** 20% - 30%

CAS-No. 7440-47-3 EC-No. 231-157-5

- **molybdenum** 0% - 10%

CAS-No. 7439-98-7 EC-No. 231-107-2

Information on ingredients / Hazardous components as per Directive 67/548/EC or Directive 1999/45/EC

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R42/43
R53

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Texts of H phrases, see in Chapter 16
See chapter 16 for text of risk phrases

4 First aid measures

Inhalation

Remove to fresh air.

If symptoms persist, call a physician.

Skin contact

Wash off with soap and water.

In the case of skin irritation or allergic reactions see a physician.

Eye contact

Rinse with plenty of water.

If eye irritation persists, consult a specialist.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Consult a physician immediately.

5 Fire-fighting measures

Suitable extinguishing media

special powder against metal fire, quenching powder, dry sand, common salt

Unsuitable extinguishing media

Water, carbon dioxide (CO_2)

Special hazards arising from the substance or mixture

May be released in case of fire: cobalt oxide.

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Advice for firefighters

The product itself does not burn.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

Avoid breathing dust.

In case of dust being formed, provide for adequate extraction.

Ensure suitable suction/aeration at the work place and with operational machinery.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Use mechanical handling equipment.

Avoid dust formation.

Fill into marked, sealable containers.

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7 Handling and storage

Handling

Precautions for safe handling

When melting, soldering and grinding:
Local ventilation.
Avoid dust formation.
If occurs dust / vapour: Wear personal protective equipment
Do not breathe Dusts and vapours:

8 Exposure controls/personal protection

Control parameters

cobalt

CAS-No.	7440-48-4	EC-No. 231-158-0
Control parameters	0.1 mg/m3	Time Weighted Average (TWA):(EH40 WEL)

chromium

CAS-No.	7440-47-3	EC-No. 231-157-5
Control parameters	0.5 mg/m3	Time Weighted Average (TWA):(EH40 OES)
Control parameters	0.05 mg/m3	Time Weighted Average (TWA):(EH40 MEL)
Control parameters	4 mg/m3	Time Weighted Average (TWA):(EH40 (UK))
type of exposure	Respirable dust.	
Control parameters	10 mg/m3	Time Weighted Average (TWA):(EH40 (UK))
type of exposure	Total inhalable dust.	
Control parameters	0.5 mg/m3	Time Weighted Average (TWA):(EH40 WEL)
Control parameters	2 mg/m3	Time Weighted Average (TWA):(EU ELV)
	Indicative	

molybdenum

CAS-No.	7439-98-7	EC-No. 231-107-2
Control parameters	10 mg/m3	Time Weighted Average (TWA):(EH40 WEL)
Control parameters	20 mg/m3	Short Term Exposure Limit (STEL):(EH40 WEL)

Engineering measures

Avoid dust formation.
In case product dust is released:
Ensure that there is suitable air extraction / ventilation at the workplace or at the working machines.
Extractor suction on specific objects.
Moisten dust residues with water, then remove them mechanically and dispose of them in suitable containers.

Personal protective equipment

Respiratory protection

When working without/without sufficient suction of objects:
Respirator with P3 particle filter

Hand protection
protective gloves
Glove material butyl-rubber, nitrile rubber, Natural Rubber/Natural latex (NR)

Eye protection
Safety glasses with side-shields
If fumes, dust occurs: basket-shaped glasses

Skin and body protection
Use suitable skin protective agents before handling product. Cleanse and apply cream to skin after work.
Preventive skin protection recommended.
In case product dust is released:
Change contaminated clothing.
Remove and wash contaminated clothing before re-use.

Hygiene measures
If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.
No eating, drinking, smoking, or snuffing tobacco at work. Wash face and/or hands before break and end of work.
Do not inhale fumes, dust, vapour.
If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.

9 Physical and chemical properties

Appearance

Form	solid
Colour	grey
Odour	odourless

Information on basic physical and chemical properties

10 Stability and reactivity

Conditions to avoid	None known
Incompatible materials	None known
Hazardous decomposition products	decomposition products if heated above melting point. Metallic vapours

11 Toxicological information

Acute oral toxicity	no data available
Acute inhalation toxicity	no data available
Acute dermal toxicity	no data available
Skin irritation	no data available
Eye irritation	no data available
Sensitization	no data available

Repeated dose toxicity	no data available
Mutagenicity assessment	no data available
Carcinogenicity	No data available
Toxicity to reproduction	No data available
Human experience	To date handling this product has not been known to cause any detrimental effects. The solubility of the alloy is extremely low. It must therefore be assumed that the daily uptake of these elements is considerably exceeds that from the alloy. As a constituent of vitamin B12 cobalt is an essential element of the human body. Molybdenum is an essential element of the human body. The daily dietary uptake of chromium amounts to several milligrams. Information taken from reference works and the literature.
Further information	No dangerous reactions are known to occur with correct handling and storage. Cobalt (dusts and vapours): Clues to possible carcinogenic effects in animal experiments. literature

12 Ecological information

Further information on ecology

Further Information	Dusts and water soluble alloy types: Prevent penetration into soil, stretches of water and drainage systems.

13 Disposal considerations

Product

Disposal according to local authority regulations.

Uncleaned packaging

Disposal according to local authority regulations.

14 Transport information

Transport/further information

Not dangerous according to transport regulations.

15 Regulatory information

National legislation

16 Other information

Risk phrase (R phrase) texts

cobalt

R42/43	May cause sensitization by inhalation and skin contact.
R53	May cause long-term adverse effects in the aquatic environment.

Texts of the H-phrases

cobalt

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H413 May cause long lasting harmful effects to aquatic life.

Further information

Changes since the last version are highlighted in the margin. This version replaces all previous versions. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Legend

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADNR	European agreement concerning the international carriage of dangerous goods by inland waterways (ADN)
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration Factor
BetrSichV	German Ordinance on Industrial Safety and Health
c. c.	closed cup
CAS	Chemical Abstract Services
CESIO	European Committee of Organic Surfactants and their Intermediates
ChemG	German Chemicals Act
CMR	Carcinogenic-Mutagenic-toxic for Reproduction
DIN	German Institute for Standardization
DNEL	Derived No Effect Level
EINECS	European Inventory of Existing Commercial Chemical Substances
GefStoffV	German Ordinance on Hazardous Substances
GGVSEB	German ordinance for road, rail and inland waterway transportation of dangerous goods
GGVSee	German ordinance for sea transportation of dangerous goods
GLP	Good Laboratory Practice.
GMO	Genetic Modified Organism
IATA DGR	International Air Transport Association – Dangerous Goods Regulations
ICAO-TI	International Civil Aviation Organisation - Technical Instructions

IMDG Code	International Maritime Dangerous Goods Code
ISO	International Organization For Standardization
LOAEL	Lowest Observed Adverse Effect Level
LOEL	Lowest Observed Effect Level
NOAEL	No Observed Adverse Effect Level
NOEC	No Observed Effect Concentration
NOEL	No Observed Effect Level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, Bioaccumulative, Toxic
PEC	Predicted Environmental Concentration
PNEC	Predicted No Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
TA	Technical Instructions (German Ordinance)
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances (German Regulations)
VCI	German "Verband der Chemischen Industrie e. V."
vPvB	Very Persistent, Very Bioaccumulative
VOC	Volatile Organic Compounds
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK	German Water Hazard Class
WHO	World Health Organization