

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 1 of 11

1. Identification

Product identifier

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Recommended use of the chemical and restrictions on use

Use of the substance/mixture

Reagents and laboratory chemicals
Only for laboratory and analysis purposes.

Uses advised against

Do not use for private purposes (household).

Details of the supplier of the safety data sheet

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Company name: AnalytiChem Services, Unipessoal, Lda
Street: Rua de Júlio Dinis 676 7º
Place: P-4050-320 Porto
Telephone: +351 226002917
E-mail: info@analytichem.com
Contact person: SDS service department
E-mail: SDS@analytichem.com
Internet: www.analytichem.com
Responsible Department: SDS service department

Supplier or manufacturer details

Company name: AnalytiChem Canada Inc.
Street: Québec, CANADA
21800 Clark Graham Ave
Place: CDN-H9X 4B6 Baie-D'Urfé
Telephone: +1 (800) 361-6820 Telefax: +1 (800) 253-5549
E-mail: info@analytichem.com
Contact person: SDS service department
E-mail: SDS@analytichem.com
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Responsible Department: AnalytiChem:
EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20
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UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500
USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378
Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701
Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333
Emergency phone number: +1 703-741-5970 (CHEMTREC)

Further Information

No data available

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 2 of 11

2. Hazard(s) identification

Classification of the chemical

29 CFR Part 1910.1200

Carcinogenicity: Carc. 1B
Reproductive toxicity: Repr. 1B
Respiratory or skin sensitization: Resp. Sens. 1
Respiratory or skin sensitization: Skin Sens. 1
Aspiration hazard: Asp. Tox. 1

Label elements

29 CFR Part 1910.1200

Signal word: Danger

Pictograms:



Hazard statements

May be fatal if swallowed and enters airways
May cause an allergic skin reaction
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause cancer
May damage fertility or the unborn child

Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/protective clothing and eye protection/face protection.
Wear respiratory protection.
If swallowed: Immediately call a poison center/doctor.
Do NOT induce vomiting.
If on skin: Wash with plenty of water.
Wash contaminated clothing before reuse.
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms: Call a poison center/doctor.
If exposed or concerned: Get medical advice/attention.
Store locked up.
Dispose of contents/container to an appropriate recycling or disposal facility.

Hazards not otherwise classified

No data available

3. Composition/information on ingredients

Mixtures

Relevant ingredients

CAS No	Components	Quantity
8042-47-5	White mineral oil, petroleum	99.5 %
7440-48-4	cobalt	0.5 %

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 3 of 11

Further Information

No data available

4. First-aid measures

Description of first aid measures

General information

Self-protection of the first aider

After inhalation

Provide fresh air.

Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

After contact with eyes

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

Remove contact lenses, if present and easy to do. Continue rinsing.

Consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water.

Do NOT induce vomiting.

Observe risk of aspiration if vomiting occurs.

Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Gastrointestinal complaints

Pneumonia

Vapors may cause drowsiness and dizziness.

Dizziness

Depression of central nervous system

Headache

Allergic reactions

Indication of any immediate medical attention and special treatment needed

Aspiration hazard

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Foam

Carbon dioxide (CO₂)

Extinguishing powder

Water

Unsuitable extinguishing media

No data available

Specific hazards arising from the chemical

Combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Carbon dioxide (CO₂)

Carbon monoxide

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 4 of 11

Metal oxide smoke, toxic

In case of warming:

Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Use water spray jet to protect personnel and to cool endangered containers.

Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

General advice

In case of warming:

Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Take precautionary measures against static discharges.

For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

Emergency procedures

Consult an expert

Do not breathe dust/fume/gas/mist/vapors/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment (PPE): see section 8

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up

For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Collect in closed and suitable containers for disposal.

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear breathing apparatus if exposed to vapors/dusts/aerosols.

Reference to other sections

Safe handling: see section 7

Personal protection equipment (PPE): see section 8

Disposal: see section 13

7. Handling and storage

Precautions for safe handling

Advice on safe handling

Read label before use. Handle and open container with care.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 5 of 11

When using do not eat, drink, smoke, sniff. Keep container tightly closed.

Use personal protection equipment.

Do not breathe vapor or spray.

Provide adequate ventilation.

Use extractor hood (laboratory).

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharges.

In case of warming:

Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Advice on general occupational hygiene

Keep away from food, drink and animal feedings.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of the protective agents should be clarified with their suppliers.

Further information on handling

Take off immediately all contaminated clothing and wash it before reuse.

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in a well-ventilated place. Keep container tightly closed.

Store in a place accessible by authorized persons only.

Hints on joint storage

National regulations

Further information on storage conditions

Keep cool. Protect from sunlight.

8. Exposure controls/personal protection

Control parameters

Exposure limits

CAS No	Substance	ppm	mg/m ³	Category	Origin
7440-48-4	Cobalt (inhalable particulate matter)		0.02	TWA (8 h)	ACGIH-2025
7440-48-4	Cobalt metal dust and fume (as Co)	-	0.05	TWA (8 h)	REL
7440-48-4	Cobalt metal, dust, and fume (as Co)	-	0.1	TWA (8 h)	REL
-	Mineral oil, excluding metal working fluids (inhalable fraction); Pure, highly and severely refined		5	TWA (8 h)	ACGIH-2025
8012-95-1	Oil mist (mineral)	-	5	TWA (8 h)	REL
		-	10	STEL (15 min)	REL
8012-95-1	Oil mist, mineral	-	5	TWA (8 h)	REL

Biological Exposure Indices (BEI-ACGIH)

CAS No	Substance	Determinant	Value	Test material	Sampling time
7440-48-4	COBALT	Cobalt	15 µg/L	urine	End of shift at end of workweek

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 6 of 11

Additional advice on limit values

Observe in addition any national regulations!

Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

goggles

Face protection umbrella

Hand protection

Tested protective gloves must be worn

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

Take off immediately all contaminated clothing and wash it before reuse.

Wash hands and face before breaks and after work and take a shower if necessary.

Draw up and observe skin protection programme.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. A respiratory protection program that meets OSHA's 29 CFR 1910.134 requirements must be followed whenever workplace conditions warrant a respirator's use.

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	Liquid
Color:	clear, colorless
Odor:	like: Hydrocarbons
Odour threshold:	No data available
Melting point/freezing point:	No data available
Boiling point or initial boiling point and boiling range:	218-800 (424.4-1472°F) °C
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / kinematic:	No data available

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 7 of 11

Water solubility:	No data available
Solubility in other solvents	
No data available	
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapor pressure:	No data available
Vapor pressure:	No data available
Density:	No data available
Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

Other information

Information with regard to physical hazard classes

Explosive properties

In case of warming:

Vapors are heavier than air, spread along floors and form explosive mixtures with air.

Sustained combustibility:

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

No data available

Solid content:

No data available

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

No data available

Viscosity / dynamic:

No data available

Flow time:

No data available

Further Information

No data available

10. Stability and reactivity

Reactivity

In case of warming:

Vapours may form explosive mixtures with air.

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Oxidising agent

Conditions to avoid

Heat

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 8 of 11

Incompatible materials

No data available

Hazardous decomposition products

in case of fire, see:

SECTION 5: Fire fighting measures

Further information

No data available

11. Toxicological information

Route(s) of Entry

There are no data available on the mixture itself.

Information on toxicological effects

Toxicokinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

Based on available data, the classification criteria are not met.

ATE_{mix} calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg

CAS No	Components				
	Exposure route	Dose	Species	Source	Method
8042-47-5	White mineral oil, petroleum				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1987)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1987)	OECD Guideline 402
7440-48-4	cobalt				
	oral	ATE 500 mg/kg			
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitizing effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled (cobalt)

May cause an allergic skin reaction (cobalt)

Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer (cobalt)

May damage fertility or the unborn child (cobalt)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity (STOT) - repeated exposure

Based on available data, the classification criteria are not met.

Carcinogenicity (OSHA): No ingredient of this mixture is listed.

Carcinogenicity (IARC): Cobalt (CAS 7440-48-4) is listed in group 2A.

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 9 of 11

Carcinogenicity (NTP): Cobalt (CAS 7440-48-4) is listed in group RAHC.

Aspiration hazard

May be fatal if swallowed and enters airways

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

Information on other hazards

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.

Other information

There are no data available on the mixture itself.

Further information

Gastrointestinal complaints

Pneumonia

Vapors may cause drowsiness and dizziness.

Dizziness

Depression of central nervous system

Headache

Allergic reactions

12. Ecological information

Persistence and degradability

There are no data available on the mixture itself.

Bioaccumulative potential

There are no data available on the mixture itself.

Mobility in soil

There are no data available on the mixture itself.

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.

Other adverse effects

Do not allow to enter into surface water or drains.

Further information

Avoid release to the environment.

13. Disposal considerations

Waste treatment methods

Disposal recommendations

Send to a physico-chemical treatment facility under observation of official regulations.

Do not allow to enter into surface water or drains.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 10 of 11

14. Transport information

U.S. DOT 49 CFR 172.101

Proper shipping name:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

UN number or ID number:

No dangerous good in sense of this transport regulation.

UN proper shipping name:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number:

No dangerous good in sense of this transport regulation.

UN proper shipping name:

No dangerous good in sense of this transport regulation.

Transport hazard class(es):

No dangerous good in sense of this transport regulation.

Packing group:

No dangerous good in sense of this transport regulation.

Special precautions for user

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No dangerous good in sense of this transport regulation.

15. Regulatory information

U.S. Regulations

National regulatory information

SARA Section 311/312 Hazards:

Cobalt (7440-48-4): Delayed (chronic) health hazard, Immediate (acute) health hazard

SARA Section 313 Toxic release inventory:

Cobalt (7440-48-4): De minimis limit = 0.1 %, Reportable threshold = Standard

Clean Air Act Section 112(b):

Cobalt (7440-48-4)

State Regulations

Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)

WARNING: This product can expose you to chemicals including Cobalt metal powder (cancer), which are known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

16. Other information

Changes

Revision date: 11/11/2025

Revision No: 1,01

This data sheet contains changes from the previous version in section(s): 2,5,9,11.

Other data

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 information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Safety Data Sheet

according to 29 CFR 1910.1200(g)

Conostan Single-Element Standard, Cobalt 5000 ppm (Co)

Revision date: 11/11/2025

Product code: AC18.04911

Page 11 of 11

Provide appropriate information, instructions and training to users.

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