

Safety Data Sheet

according to Regulation (EC) No 1907/2006

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 1 of 12

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

1.1. Product identifier

NOx Konverter enthält 4 g Chromtrioxid

Substance name: chromium (VI) trioxide
CAS No: 1333-82-0
Index No: 024-001-00-0
EC No: 215-607-8

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

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).

1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH
ACD
Street: Stempelstraße 6
Place: D-47167 Duisburg
Telephone: 0203/5194-0
Telefax: 0203/5194-290
E-mail: info@analytichem.de
Contact person: Abteilung Produktsicherheit
Telephone: 0203/5194-107/117
E-mail: produktsicherheit@analytichem.de
Internet: www.analytichem.de
Responsible Department: Abteilung Produktsicherheit

1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

Further Information

A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Ox. Sol. 1; H271
Carc. 1A; H350
Muta. 1B; H340
Repr. 2; H361f
Acute Tox. 2; H330
Acute Tox. 3; H311
Acute Tox. 3; H301
Skin Corr. 1A; H314
Resp. Sens. 1; H334
Skin Sens. 1; H317
STOT SE 3; H335
STOT RE 1; H372

according to Regulation (EC) No 1907/2006

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 2 of 12

Aquatic Acute 1; H400
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Signal word:** Danger**Pictograms:****Hazard statements**

H271	May cause fire or explosion; strong oxidiser.
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P201	Obtain special instructions before use.
P220	Keep away from clothing and other combustible materials.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

Special labelling of certain mixtures

Restricted to professional users.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients**3.1. Substances**

Sum formula:	CrO ₃
Molecular weight:	99,99 g/mol

according to Regulation (EC) No 1907/2006

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 3 of 12

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
1333-82-0	chromium (VI) trioxide			100 %
	215-607-8	024-001-00-0		
	Ox. Sol. 1, Carc. 1A, Muta. 1B, Repr. 2, Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, Skin Corr. 1A, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H271 H350 H340 H361f H330 H311 H301 H314 H334 H317 H335 H372 H400 H410			

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		
1333-82-0	215-607-8	chromium (VI) trioxide	100 %
	inhalation: ATE = 0,5 mg/l (vapours); inhalation: ATE = 0,05 mg/l (dusts or mists); dermal: LD50 = 57 mg/kg; oral: LD50 = 52 mg/kg STOT SE 3; H335: >= 1 - 100		

Further Information

No data available

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

- Self-protection of the first aider
- Call a physician immediately.

After inhalation

- Provide fresh air.
- If breathing is irregular or stopped, administer artificial respiration.
- 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

- 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.
- Remove contact lenses, if present and easy to do. Continue rinsing.
- Protect uninjured eye.

After ingestion

- Rinse mouth immediately and drink plenty of water.
- Do not allow a neutralisation agent to be drunk.
- Call a physician immediately.

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

- Irritant
- corrosive
- Cough
- Dyspnoea
- Allergic reactions
- Risk of serious damage to eyes.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 4 of 12

Gastrointestinal complaints
Pneumonia
Spasms
Circulatory collapse
Unconsciousness
Methaemoglobin formation

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

No data available

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

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-combustible solids
Oxidising properties
Hazardous combustion products
In case of fire may be liberated: Metal oxide smoke, toxic

5.3. Advice for firefighters

Do not inhale explosion and combustion gases.
Avoid contact with skin, eyes and clothes.
In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Move undamaged containers from immediate hazard area if it can be done safely.
Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****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/vapours/spray.

For emergency responders

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

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. 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).
Collect in closed and suitable containers for disposal.

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 5 of 12

Take up carefully when dry. Take up dust-free and set down dust-free.

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/vapours/spray.

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

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**

Avoid exposure - obtain special instructions before use.

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

Avoid dust formation. Do not breathe dust.

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

Use personal protection equipment. Use extractor hood (laboratory).

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

Material, oxygen-rich, Oxidising

Keep away from sources of ignition - No smoking.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Make available sufficient washing facilities

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Further information on handling

Draw up and observe skin protection programme.

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

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

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

7.2. 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

Keep away from: Combustible substance (Material, oxygen-rich, Oxidising)
national regulations

Further information on storage conditions

Store in a dry place.

Keep away from sources of ignition - No smoking.

storage temperature < +30°C

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 6 of 12

8.1. Control parameters**PNEC values**

CAS No	Substance	
Environmental compartment		Value
1333-82-0	chromium (VI) trioxide	
Freshwater		0,003 mg/l
Marine water		0,003 mg/l
Freshwater sediment		0,15 mg/kg
Secondary poisoning		17000000 mg/kg
Micro-organisms in sewage treatment plants (STP)		0,21 mg/l
Soil		0,031 mg/kg

8.2. 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.

Avoid dust formation. Do not breathe dust.

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

goggles

Wear eye protection/face protection.

Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Trade name/designation KCL 741 Dermatril® L

Suitable material: NBR (Nitrile rubber) 0,11 mm

Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation KCL 741 Dermatril® L

Suitable material: NBR (Nitrile rubber) 0,11 mm

Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Skin protection

Wear suitable protective clothing.

Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

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

Respiratory protection

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

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 7 of 12

Filtering device with filter or ventilator filtering device of type: P3

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.

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	solid
Colour:	dark red
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	197 °C
Boiling point or initial boiling point and boiling range:	No data available
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 (at 20 °C):	<1 (100 g/l)
Viscosity / kinematic:	No data available
Water solubility:	No data available
Solubility in other solvents	No data available
Partition coefficient n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	2,7 g/cm ³
Bulk density:	900 kg/m ³
Relative vapour density:	No data available

9.2. Other information**Information with regard to physical hazard classes**

Explosive properties

No data available

Sustained combustibility:

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

Oxidising agent, strong

Other safety characteristics

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

0

Solid content:

100%

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

according to Regulation (EC) No 1907/2006

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 8 of 12

No data available:

Viscosity / dynamic:

No data available

Flow time:

No data available

Further Information

No data available

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

Oxidising agent, strong

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Combustible substance

Alkali metals

Ammonia (NH₃)

Hydrazine

NO₃

Reducing agent

Nitric acid

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

In case of fire may be liberated:

SECTION 5: Firefighting measures

Further information

No data available

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Toxicokinetics, metabolism and distribution**

No data available

Acute toxicity

Fatal if inhaled.

Fatal in contact with skin.

Toxic if swallowed.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1333-82-0	chromium (VI) trioxide				
	oral	LD50 52 mg/kg	Rat	Other company data (1987)	OECD Guideline 401
	dermal	LD50 57 mg/kg	Rabbit	Other company data (1987)	OECD Guideline 402
	inhalation vapour	ATE 0,5 mg/l			
	inhalation dust/mist	ATE 0,05 mg/l			

Safety Data Sheet

according to Regulation (EC) No 1907/2006

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 9 of 12

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (chromium (VI) trioxide)

May cause an allergic skin reaction. (chromium (VI) trioxide)

Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. (chromium (VI) trioxide)

May cause genetic defects. (chromium (VI) trioxide)

Suspected of damaging fertility. (chromium (VI) trioxide)

STOT-single exposure

May cause respiratory irritation. (chromium (VI) trioxide)

STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure. (chromium (VI) trioxide)

Aspiration hazard

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

Specific effects in experiment on an animal

No data available

Additional information on tests

No data available

Practical experience

No data available

11.2. Information on other hazards**Other information**

No data available

Further information

Irritant

corrosive

Cough

Dyspnoea

Allergic reactions

Risk of serious damage to eyes.

Gastrointestinal complaints

Pneumonia

Spasms

Circulatory collapse

Unconsciousness

Methaemoglobin formation

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

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No data available

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 10 of 12

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

12.7. Other adverse effects

Discharge into the environment must be avoided.

Harmful effect due to pH shift.

Further information

Do not allow to enter into surface water or drains.

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

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

Dispose of waste according to applicable legislation.

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

Do not allow to enter into surface water or drains.

Contaminated packaging

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

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

SECTION 14: Transport information**Land transport (ADR/RID)**

<u>14.1. UN number or ID number:</u>	UN 1463
<u>14.2. UN proper shipping name:</u>	CHROMIUM TRIOXIDE, ANHYDROUS
<u>14.3. Transport hazard class(es):</u>	5.1
<u>14.4. Packing group:</u>	II
Hazard label:	5.1+6.1+8
Classification code:	OTC
Special Provisions:	510
Limited quantity:	1 kg
Excepted quantity:	E2
Transport category:	2
Hazard No:	568
Tunnel restriction code:	E

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	UN 1463
<u>14.2. UN proper shipping name:</u>	CHROMIUM TRIOXIDE, ANHYDROUS
<u>14.3. Transport hazard class(es):</u>	5.1
<u>14.4. Packing group:</u>	II
Hazard label:	5.1+6.1+8
Classification code:	OTC
Special Provisions:	510
Limited quantity:	1 kg
Excepted quantity:	E2

Marine transport (IMDG)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 11 of 12

14.1. UN number or ID number:	UN 1463
14.2. UN proper shipping name:	CHROMIUM TRIOXIDE, ANHYDROUS
14.3. Transport hazard class(es):	5.1
14.4. Packing group:	II
Hazard label:	5.1+6.1+8
Special Provisions:	-
Limited quantity:	1 kg
Excepted quantity:	E2
EmS:	F-A, S-Q

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1463
14.2. UN proper shipping name:	CHROMIUM TRIOXIDE, ANHYDROUS
14.3. Transport hazard class(es):	5.1
14.4. Packing group:	II
Hazard label:	5.1+6.1+8
Limited quantity Passenger:	2.5 kg
Passenger LQ:	Y544
Excepted quantity:	E2
IATA-packing instructions - Passenger:	558
IATA-max. quantity - Passenger:	5 kg
IATA-packing instructions - Cargo:	562
IATA-max. quantity - Cargo:	25 kg

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:	Yes
Danger releasing substance:	chromium trioxide

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Authorisations (REACH, annex XIV):
chromium (VI) trioxide

Restrictions on use (REACH, annex XVII):
Entry 28, Entry 75

Information according to Directive
2012/18/EU (SEVESO III): H2 ACUTE TOXIC

Additional information: P8, E1

Additional information

SVHC substance.

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

Water hazard class (D): 3 - highly hazardous to water

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,4,6,8,9,11,12,13.

NOx Konverter enthält 4 g Chromtrioxid

Revision: 28.01.2025

Product code: 33646

Page 12 of 12

Abbreviations and acronyms

Ox. Sol. 1: Oxidising solids, hazard category 1
Acute Tox. 2: Acute toxicity, hazard category 2
Skin Corr. 1A: Skin corrosion, sub-category 1A
Eye Dam. 1: Serious eye damage, hazard category 1
Resp. Sens. 1: Respiratory sensitisation, hazard category 1
Skin Sens. 1: Skin sensitisation, hazard category 1
Muta. 1B: Germ cell mutagenicity, hazard category 1B
Carc. 1A: Carcinogenicity, hazard category 1A
Repr. 2: Reproductive toxicity, hazard category 2
STOT SE 3: Specific target organ toxicity - single exposure, hazard category 3
STOT RE 1: Specific target organ toxicity - repeated exposure, hazard category 1
Aquatic Acute 1: Hazardous to the aquatic environment, hazard category: Acute 1
Aquatic Chronic 1: Hazardous to the aquatic environment, long-term hazard category: Chronic 1

Relevant H and EUH statements (number and full text)

H271	May cause fire or explosion; strong oxidiser.
H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Further Information

Provide appropriate information, instructions and training to users

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.