

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

KRONES colclean AD 1002
Article number: 0903174868, 0903203126, 0903203201

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

Cleaning agent

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company KIC KRONES Internationale Cooperationsgesellschaft mbH
 Böhmerwaldstraße 5
 93073 Neutraubling / GERMANY
 Phone +49 9401 70-3020
 Fax +49 9401 70-3696
 Homepage www.kic-krones.com
 E-mail kic@kic-krones.com

Address enquiries to

Technical information kic@kic-krones.com

Safety Data Sheet sdb@chemiebueero.de

1.4 Emergency telephone number

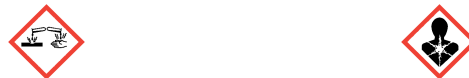
Advisory body +49 (0)89-19240 (24h) (english)

SECTION 2: Hazards identification
2.1 Classification of the substance or mixture

Met. Corr. 1: H290 May be corrosive to metals.
 Eye Dam. 1: H318 Causes serious eye damage.
 STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms

Signal word

DANGER

Contains:

Tetrasodium ethylene diamine tetraacetate

Hazard statements

H290 May be corrosive to metals.
 H318 Causes serious eye damage.
 H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P260 Do not breathe vapours / spray.
 P280 Wear protective gloves / protective clothing / eye protection / face protection.
 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.
 P390 Absorb spillage to prevent material damage.

Cleaner, 648/2004/CE, contains:

15 - <30% EDTA
 < 5% polycarboxylates
 < 5% nitrilotriacetic acid

2.3 Other hazards
Physico-chemical hazards

May be corrosive to metals.

Other hazards

Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

Product-type:

The product is a mixture.

Range [%]	Substance
10 - 20	Tetrasodium ethylene diamine tetraacetate CAS: 64-02-8, EINECS/ELINCS: 200-573-9, EU-INDEX: 607-428-00-2, Reg-No.: 01-2119486762-27-XXXX GHS/CLP: Acute Tox. 4: H302 H332 - Eye Dam. 1: H318 - STOT RE 2: H373
0,5 - < 2,5	Trisodium nitrilotriacetate CAS: 5064-31-3, EINECS/ELINCS: 225-768-6, EU-INDEX: 607-620-00-6, Reg-No.: 01-2119519239-36-XXXX GHS/CLP: Acute Tox. 4: H302 - Eye Irrit. 2: H319 - Carc. 2: H351
0,5 - < 1,5	Sodium glycollate CAS: 2836-32-0, EINECS/ELINCS: 220-624-9 GHS/CLP: Eye Dam. 1: H318 - Skin Irrit. 2: H315
0,5 - < 1,5	Glycine, N-(carboxymethyl)-N-[2-[(carboxymethyl)amino]ethyl]-, trisodium salt CAS: 19019-43-3 GHS/CLP: Eye Irrit. 2: H319
< 0,5	Sodium hydroxide CAS: 1310-73-2, EINECS/ELINCS: 215-185-5, EU-INDEX: 011-002-00-6 GHS/CLP: Skin Corr. 1A: H314

Comment on component parts

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
All chemical substances in this material are included on or exempted from listing on the TSCA Inventory.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Take off contaminated clothing and wash before reuse.
Inhalation	In the event of symptoms seek medical treatment.
Skin contact	In case of contact with skin wash off immediately with plenty of water. Consult a doctor if skin irritation persists.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Get medical advice.

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: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	foam, dry powder, water spray jet, carbon dioxide
Extinguishing media that must not be used	Full water jet

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.
Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
High risk of slipping due to leakage/spillage of product.
Use personal protective equipment.

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance with the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
Avoid spilling or spraying in enclosed areas.
Avoid contact with eyes and skin. Use personal protective equipment.

Do not eat or drink when working.
Wash hands before breaks and after work.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Prevent penetration into the ground.
Keep only in original container.

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

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection
8.1 Control parameters
Ingredients with occupational exposure limits to be monitored (GB)

Substance
Sodium hydroxide
CAS: 1310-73-2, EINECS/ELINCS: 215-185-5, EU-INDEX: 011-002-00-6
Short-term exposure (15-minute): 2 mg/m ³

DNEL

Substance
Trisodium nitrilotriacetate, CAS: 5064-31-3
Industrial, inhalative, Long-term - systemic effects: 3,5 mg/m ³ .
Industrial, inhalative, Long-term - local effects: 3,5 mg/m ³ .
Industrial, inhalative, Acute - local effects: 5,25 mg/m ³ .
Industrial, inhalative, Acute - systemic effects: 5,25 mg/m ³ .
general population, oral, Long-term - systemic effects: 0,5 mg/kg.
general population, inhalative, Acute - systemic effects: 1,75 mg/m ³ .
general population, inhalative, Acute - local effects: 1,75 mg/m ³ .
Tetrasodium ethylene diamine tetraacetate, CAS: 64-02-8
Industrial, inhalative, Long-term - local effects: 1,5 mg/m ³ .
general population, oral, Long-term - systemic effects: 25 mg/kg bw/day.
general population, inhalative, Long-term - local effects: 0,6 mg/m ³ .

PNEC

Substance
Trisodium nitrilotriacetate, CAS: 5064-31-3
oral (food), 0,2 mg/kg.
soil, 0,182 mg/kg.
sediment (seaater), 0,364 mg/kg.
sediment (freshwater), 3,64 mg/kg.
sewage treatment plants (STP), 540 mg/l.
seawater, 0,093 mg/l.
freshwater, 0,93 mg/l.
Tetrasodium ethylene diamine tetraacetate, CAS: 64-02-8
soil, 0,72 mg/kg.
sewage treatment plants (STP), 43 mg/L.
seawater, 0,22 mg/L.
freshwater, 2,2 mg/L.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	Tightly fitting goggles. (EN 166:2001)
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. > 0,11 mm, Butyl rubber, >240 min (EN 374-1/-2/-3).
Skin protection	Protective clothing.
Other	Avoid contact with eyes and skin. Do not breathe vapour/spray. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Not required under normal conditions. If ventilation is insufficient, wear respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	not applicable
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Color	brown
Odor	characteristic
Odour threshold	No information available.
pH-value	ca. 9
pH-value [1%]	No information available.
Boiling point [°C]	> 100
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	1,2
Bulk density [kg/m³]	not applicable
Solubility in water	completely miscible
Partition coefficient [n-octanol/water]	No information available.
Viscosity	No information available.
Relative vapour density determined in air	No information available.
Evaporation speed	No information available.
Melting point [°C]	< 0
Autoignition temperature [°C]	not self-igniting
Decomposition temperature [°C]	No information available.

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Corrodes aluminium.
Reactions with light metals.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

No dangerous reactions known if used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product
ATE-mix, oral, > 2000 mg/kg.
Substance
Trisodium nitrilotriacetate, CAS: 5064-31-3
LD50, dermal, Rabbit: > 10000 mg/kg.
LC50, inhalative, Rat: > 5 mg/l (4 h).
Tetrasodium ethylene diamine tetraacetate, CAS: 64-02-8
LD50, inhalative, Rat: > 1 - 5 mg/L 4h.
LD50, oral, Rat: 1780 mg/kg.

Serious eye damage/irritation	Risk of serious damage to eyes. Calculation method
Skin corrosion/irritation	Based on the available information, the classification criteria are not fulfilled.
Respiratory or skin sensitisation	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity — single exposure	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity — repeated exposure	May cause damage to organs through prolonged or repeated exposure through inhalation. Calculation method
Mutagenicity	Based on the available information, the classification criteria are not fulfilled.
Reproduction toxicity	Based on the available information, the classification criteria are not fulfilled.
Carcinogenicity	No classification due to substance-specific concentration limits.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	

Toxicological data of complete product are not available.
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Substance
Trisodium nitrilotriacetate, CAS: 5064-31-3
LC50, (96h), Pimephales promelas: > 100 mg/l (APHA 1971).
EC50, Pseudomonas fluorescens: 3200 - 5600 mg/l.
EC50, (72h), Scenedesmus subspicatus: > 91,5 mg/l.
Sodium hydroxide, CAS: 1310-73-2
LC50, (96h), fish: 35-189 mg/l (Lit).
EC50, (48h), Ceriodaphnia dubia: 40,4 mg/l (Lit).
Tetrasodium ethylene diamine tetraacetate, CAS: 64-02-8
LC50, (96h), fish: > 100 mg/L.
EC50, (72h), Algae: > 100 mg/L.
EC50, (24h), Daphnia magna: > 500 mg/L.

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	(CAS 64-02-8) - The product is not readily biodegradable.

12.3 Bioaccumulative potential

BCF: ca. 1,8 (28d)(CAS 64-02-8)

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Other adverse effects

Ecological data of complete product are not available.

The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

Do not discharge product unmonitored into the environment or into the drainage.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Coordinate disposal with the authorities if necessary.

Waste no. (recommended) 200129*

Contaminated packaging

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended) 150110*

SECTION 14: Transport information
14.1 UN number

Transport by land according to ADR/RID 3267

Inland navigation (ADN) 3267

Marine transport in accordance with IMDG 3267

Air transport in accordance with IATA 3267

14.2 UN proper shipping name

Transport by land according to ADR/RID Corrosive liquid, basic, organic, n.o.s. (EDTANa4-solution)

- Classification Code C7

- Label



- ADR LQ 5 l

- ADR 1.1.3.6 (8.6) Transport category (tunnel restriction code) 3 (E)

Inland navigation (ADN) Corrosive liquid, basic, organic, n.o.s. (EDTANa4-solution)

- Classification Code C7

- Label



Marine transport in accordance with IMDG Corrosive liquid, basic, organic, n.o.s. (EDTANa4-solution)

- EMS F-A, S-B

- Label



- IMDG LQ 5 l

Air transport in accordance with IATA Corrosive liquid, basic, organic, n.o.s. (EDTANa4-solution)

- Label


14.3 Transport hazard class(es)

Transport by land according to ADR/RID 8

Inland navigation (ADN) 8

Marine transport in accordance with IMDG 8

Air transport in accordance with IATA 8

14.4 Packing group

Transport by land according to ADR/RID III

Inland navigation (ADN) III

Marine transport in accordance with IMDG III

Air transport in accordance with IATA III

14.5 Environmental hazards

Transport by land according to ADR/RID no

Inland navigation (ADN) no

Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available.

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

EEC-REGULATIONS 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2008/47/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS DOT-Classification, ADR (2017); IMDG-Code (2017, 38. Amdt.); IATA-DGR (2017).

NATIONAL REGULATIONS (GB): EH40/2005 Workplace exposure limits (Second edition, published December 2011). CHIP 3/ CHIP 4

- Observe employment restrictions for people Observe employment restrictions for young people.

- VOC (2010/75/CE) not applicable

15.2 Chemical safety assessment

For this product a chemical safety assessment has not been carried out.

SECTION 16: Other information**16.1 Hazard statements (SECTION 03)**

H315 Causes skin irritation.
 H351 Suspected of causing cancer.
 H319 Causes serious eye irritation.
 H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
 H318 Causes serious eye damage.
 H302+H332 Harmful if swallowed or if inhaled.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
 ATE = acute toxicity estimate
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging
 DMEL = Derived Minimum Effect Level
 DNEL = Derived No Effect Level
 EC50 = Median effective concentration
 ECB = European Chemicals Bureau
 EEC = European Economic Community
 EINECS = European Inventory of Existing Commercial Chemical Substances
 ELINCS = European List of Notified Chemical Substances
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
 IC50 = Inhibition concentration, 50%
 IMDG = International Maritime Code for Dangerous Goods
 IUCLID = International Uniform Chemical Information Database
 LC50 = Lethal concentration, 50%
 LD50 = Median lethal dose
 LC0 = lethal concentration, 0%
 LOAEL = lowest-observed-adverse-effect level
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships
 NOAEL = No Observed Adverse Effect Level
 NOEC = No Observed Effect Concentration
 PBT = Persistent, Bioaccumulative and Toxic substance
 PNEC = Predicted No-Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
 STP = Sewage Treatment Plant
 TLV@/TWA = Threshold limit value – time-weighted average
 TLV@STEL = Threshold limit value – short-time exposure limit
 VOC = Volatile Organic Compounds
 vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Met. Corr. 1: H290 May be corrosive to metals. (Calculation method)
 Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)
 STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure. (Calculation method)

Modified position

SECTION 3 been added: Sodium hydroxide
SECTION 3 been added: Sodium glycollate
SECTION 3 been added: Glycine, N-(carboxymethyl)-N-[2-[(carboxymethyl)amino]ethyl]-, trisodium salt
SECTION 3 been added: Trisodium nitrilotriacetate
SECTION 3 been added: Tetrasodium ethylene diamine tetraacetate
SECTION 2 deleted: P261 Avoid breathing vapours / spray.
SECTION 2 been added: STOT RE 2
SECTION 2 been added: health hazard
SECTION 2 been added: H373 May cause damage to organs through prolonged or repeated exposure.
SECTION 2 been added: P260 Do not breathe vapours / spray.
SECTION 4 been added: Take off contaminated clothing and wash before reuse.
SECTION 7 been added: Avoid contact with eyes and skin. Use personal protective equipment.
SECTION 7 been added: Take off contaminated clothing and wash before reuse.
SECTION 8 been added: Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
SECTION 9 been added: No information available.
SECTION 9 deleted: not determined
SECTION 11 been added: No classification due to substance-specific concentration limits.
SECTION 11 been added: May cause damage to organs through prolonged or repeated exposure through inhalation.
SECTION 11 been added: Based on the available information, the classification criteria are not fulfilled.
SECTION 11 deleted: not determined
SECTION 11 been added: Calculation method
SECTION 11 been added: Risk of serious damage to eyes.
SECTION 12 been added: No information available.
SECTION 12 deleted: not determined
SECTION 16 been added: Calculation method

Copyright: Chemiebüro®

