

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

1.1 Product identifier

KRONES colclean DI 1201

Article number: 0904394290, 0904394296, 0904590700

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

1.2.1 Relevant uses

Disinfectant

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

KRONES (Thailand) Co., Ltd.
39th Floor Interlink Tower 1858/138
Banana Trade Road, Banana Sub District
10260 Bangkok / KINGDOM OF THAILAND
Phone +66 2 763 6500
Fax +66 2 763 6501
E-mail sales@krones.co.th

Address enquiries to

Technical information

sales@krones.co.th

Safety Data Sheet

sdb@chemiebuero.de

1.4 Emergency telephone number

Company




+66 2 763 6500

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Org. Perox. F: H242 Heating may cause a fire.
Skin Corr. 1A: H314 Causes severe skin burns and eye damage.
Eye Dam. 1: H318 Causes serious eye damage.
Acute Tox. 4: H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
STOT SE 3: H335 May cause respiratory irritation.

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:	Acetic acid Peracetic acid Hydrogen peroxide	
Hazard statements	H242 Heating may cause a fire. H314 Causes severe skin burns and eye damage. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled. H335 May cause respiratory irritation.	
Precautionary statements	P280 Wear protective gloves / protective clothing / eye protection / face protection. P260 Do not breathe mist / vapours / spray. P220 Keep away from clothing and other combustible materials. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P234 Keep only in original container. 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. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P363 Wash contaminated clothing before reuse. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTER / doctor if you feel unwell. P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P370+P378 In case of fire: Use Water for extinction. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P411 Store at temperatures not exceeding 30 °C/ 86 °F. P235 Keep cool. P410 Protect from sunlight.	
Biocide (528/2012/CE) contains:	17 g/100g Peracetic acid 11 g/100g Hydrogen peroxide Registration: -	

2.3 Other hazards

Environmental hazards	Does not contain any PBT or vPvB substances.
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
33 - 38	Acetic acid
	CAS: 64-19-7, EINECS/ELINCS: 200-580-7, EU-INDEX: 607-002-00-6
	GHS/CLP: Flam. Liq. 3: H226 - Skin Corr. 1A: H314 - Eye Dam. 1: H318
15 - 17	Peracetic acid
	CAS: 79-21-0, EINECS/ELINCS: 201-186-8, EU-INDEX: 607-094-00-8
	GHS/CLP: Flam. Liq. 3: H226 - Org. Perox. C: H242 - Skin Corr. 1A: H314 - Acute Tox. 4: H302 H312 H332 - Aquatic Acute 1: H400 - STOT SE 3: H335, M = 1
9 - 11	Hydrogen peroxide
	CAS: 7722-84-1, EINECS/ELINCS: 231-765-0, EU-INDEX: 008-003-00-9
	GHS/CLP: Ox. Liq. 1: H271 - Skin Corr. 1A: H314 - Acute Tox. 4: H302 H332

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**

Remove contaminated soaked clothing immediately and dispose of safely.

Inhalation

Ensure supply of fresh air.
Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.
In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice.

Skin contact

Immediate medical treatment necessary, as untreated burns can result in slow-healing wounds.
In case of contact with skin wash off immediately with plenty of water.

Eye contact

Consult a doctor immediately.
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

Consult a doctor immediately.
Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Product is caustic.
Risk of blindness!
If swallowed - risk of perforation!

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**

Water spray jet.

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.
Has a fire-promoting effect due to release of oxygen.

5.3 Advice for firefighters

Do not inhale explosion and/or combustion gases.

Use self-contained breathing apparatus.

Wear full protective suit.

Cool containers at risk with water spray jet.

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

Keep away from all sources of ignition.

Ensure adequate ventilation.

Wear suitable protective equipment. For personal protection see SECTION 8.

Remove persons to safety.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, universal absorbent, diatomaceous earth).

Dispose of absorbed material in accordance with the regulations.

Flush away residues with water.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Vacuuming in situ required.

Use only in well-ventilated areas.

Avoid spilling or spraying in enclosed areas.

Place the container in an upright position and protect it against falling over.

When diluting, always stir product into water.

May cause fire or explosion; strong oxidiser.

Keep away from open flames, hot surfaces and sources of ignition.

Do not smoke.

Use explosion-proofed equipment/fittings and non-sparking tools.

Do not eat, drink, smoke or take drugs at work.

Showers and eye wash stations should be provided.

Remove soiled or soaked clothing immediately.

Clean skin thoroughly after work, apply skin cream.

Use barrier skin cream.

7.2 Conditions for safe storage, including any incompatibilities

Provide acid-resistant floor.

Keep only in original container.

Provide ventilation of containers.

Do not store with oxidizing or self-igniting materials.

Do not store with combustible and/or organic materials.

Do not store with alkalies.

Do not store together with reducing agents.

Do not store together with metals.

Always close container tightly after removal of product.

Container should not be gas-tight.

Keep container in a well-ventilated place.

Protect from heat/overheating and from sun.

Protect from contamination.

Do not keep at temperatures above 30 °C.

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
Hydrogen peroxide
CAS: 7722-84-1, EINECS/ELINCS: 231-765-0, EU-INDEX: 008-003-00-9
Long-term exposure: 1 ppm, 1,4 mg/m ³
Short-term exposure (15-minute): 2 ppm, 2,8 mg/m ³
Acetic acid
CAS: 64-19-7, EINECS/ELINCS: 200-580-7, EU-INDEX: 607-002-00-6
Long-term exposure: 10 ppm, 25 mg/m ³
Short-term exposure (15-minute): 15 ppm, 37 mg/m ³

Ingredients with occupational exposure limits to be monitored (EU)

Substance / EC LIMIT VALUES
Acetic acid
CAS: 64-19-7, EINECS/ELINCS: 200-580-7, EU-INDEX: 607-002-00-6
Eight hours: 10 ppm, 25 mg/m ³
Short-term (15-minute): 20 ppm, 50 mg/m ³

DNEL

Substance
Acetic acid, CAS: 64-19-7
Industrial, inhalative, Acute - local effects: 25 mg/m ³ .
Industrial, inhalative, Long-term - local effects: 25 mg/m ³ .
general population, inhalative, Acute - local effects: 25 mg/m ³ .
general population, inhalative, Long-term - local effects: 25 mg/m ³ .

PNEC

Substance
Acetic acid, CAS: 64-19-7
freshwater, 3,058 mg/l.
seawater, 0,3058 mg/l.
sediment (freshwater), 11,36 mg/kg.
sediment (seaater), 1,136 mg/kg.
soil, 0,478 mg/kg.
sewage treatment plants (STP), 85 mg/l.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Tightly fitting goggles. (EN 166:2001) Face shield.
Hand protection	The details concerned are recommendations. Please contact the glove supplier for further information. 0,7 mm, Nitrile rubber, >480 min (EN 374-1/-2/-3). 0,7 mm, Neoprene, >480 min (EN 374-1/-2/-3).
Skin protection	Acid-resistant 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	If ventilation is insufficient, wear respiratory protection. Short term: filter apparatus, combination filter B-P2. (DIN EN 14387)
Thermal hazards	See SECTION 7.
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	colourless clear
Odor	pungent acetic
Odour threshold	No information available.
pH-value	< 1
pH-value [1%]	2 - 3 (25 °C / 77 °F)
Boiling point [°C]	~ 109 °C / 228 °F
Flash point [°C]	Closed cup - 80 °C / 176 °F Open Cup - No measurable flash point up to 110°C / 230 °F Fire Point - No fire point. This material will not sustain a flame
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	yes
Vapour pressure/gas pressure [kPa]	22 mm Hg (25 °C / 77 °F)
Density [g/ml]	1,13 (20 °C / 68,0 °F)
Bulk density [kg/m³]	not applicable
Solubility in water	completely miscible
Partition coefficient [n-octanol/water]	-0,52 (25 °C / 77 °F)
Viscosity	No information available.
Relative vapour density determined in air	No information available.
Evaporation speed	> 1 (n-butyl acetate=1)
Melting point [°C]	-49
Autoignition temperature [°C]	305 °C / 581 °F
Decomposition temperature [°C]	> 55 °C / > 131 °F (SADT)

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Strong oxidizing agent.

Can cause or intensify fire.

The contact with organic materials f. e. wood, cotton or straw may cause a fire.

Self accelerating exothermic reaction with evolution of oxygen.

Upon decomposition in closed containers and tubes risk of bursting due to buildup of overpressure.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.

Reactions with alkalies (lyes).

Reactions with combustible and/or substances.

Reactions with reducing agents.

Reactions with peroxides.

May produce explosive reactions with Acetic Anhydride.

10.4 Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Sunlight

Avoid temperatures above 30 °C / 86 °F.

10.5 Incompatible materials

See SECTION 10.3.

10.6 Hazardous decomposition products

In the case of heating following (decomposition) products may occur:

Oxygen.

Aqueous vapor.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity**

Substance
Peracetic acid, CAS: 79-21-0
LD50, oral, Rat: 50 - 500 mg/kg (35% Peracetic acid).
LD50, dermal, Rat: >= 2000 mg/kg (0,15 - 0,89% Peracetic acid).
LD50, dermal, Rat: 1147 mg/kg (5% Peracetic acid).
LD50, dermal, Rat: 1957 mg/kg (15% Peracetic acid).
LD50, oral, Rat: 185 - 3622 mg/kg (2.6 - 6.11% Peracetic acid).
LD50, oral, Rat: 1026 - 1780 mg/kg (15% Peracetic acid).
LD50, oral, Rat: 9 - 203 mg/l (Lit.).
LD50, dermal, Rabbit: 56 - 229 mg/l (Lit.).
LC50, inhalative, Rat: 76 - 189 mg/m ³ /4h (15% Peracetic acid).
LC50, inhalative, Rat: 204 mg/m ³ /4h (5% Peracetic acid).
LC50, inhalative, Rat: > 241 - 76 mg/l/4h.
Hydrogen peroxide, CAS: 7722-84-1
LD50, dermal, Rat: >2000 mg/kg bw (IUCLID).
LD50, oral, Rat: 75 mg/kg bw (70% H ₂ O ₂) (IUCLID).
LC50, inhalative, Rat: 0,17 mg/L (50% H ₂ O ₂) (4h) (IUCLID).
Acetic acid, CAS: 64-19-7
LD50, oral, Rat: 1780 mg/kg (Lit.).
LD50, dermal, Rabbit: 1060 mg/kg (Lit.).
LC50, inhalative, Rat: 11,4 mg/l 4h.

Serious eye damage/irritation	Risk of serious damage to eyes. Calculation method
Skin corrosion/irritation	Product is caustic. Calculation method
Respiratory or skin sensitisation	Based on the available information, the classification criteria are not fulfilled.
Specific target organ toxicity — single exposure	May cause respiratory irritation. Calculation method
Specific target organ toxicity — repeated exposure	Based on the available information, the classification criteria are not fulfilled.
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	Based on the available information, the classification criteria are not fulfilled.
Aspiration hazard	Based on the available information, the classification criteria are not fulfilled.
General remarks	

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
Peracetic acid, CAS: 79-21-0
LC50, (96h), Oncorhynchus mykiss: 1,6 mg/l (5% Peracetic acid).
LC50, (96h), Oncorhynchus mykiss: 0,53 mg/l (15% Peracetic acid).
LC50, (96h), Oncorhynchus mykiss: 0,9 - 2,0 mg/l (Lit.).
EC50, (72h), Selenastrum capricornutum: 0,16 mg/l (5% Peracetic acid).
EC50, (48h), Daphnia magna: 0,73 mg/l (5% Peracetic acid).
EC50, (48h), Daphnia magna: 0,5 - 1,0 mg/l (Lit.).
NOEC, (72h), Selenastrum capricornutum: 0,061 mg/l (5% Peracetic acid).
NOEC, (21d), Daphnia magna: 0,05 mg/l (15% Peracetic acid).
Hydrogen peroxide, CAS: 7722-84-1
LC50, (96h), Pimephales promelas: 16,4 mg/L (IUCLID).
EC50, (24h), Daphnia magna: 7,7 mg/L (IUCLID).
Acetic acid, CAS: 64-19-7
LC50, (96h), Lepomis macrochirus: 75 mg/l.
EC50, (24h), Daphnia magna: 47 mg/l.
IC5, (16h), Scenedesmus quadricauda (alga): 4000 mg/l.

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	The product is an acid. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.
Biological degradability	The product is readily biodegradable.

12.3 Bioaccumulative potential

logKow: -0,52

12.4 Mobility in soil

Peracetic acid released in the environment will partition almost exclusively (>99%) to the water compartment. Only a minor part (<1%) will remain in the atmosphere, where it is expected to undergo rapid decomposition with a half life of 22 minutes. The fate of peracetic acid in the environment is mainly determined by its degradation.

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

Harmful effect due to pH shift.

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) 070601*
070101*

Contaminated packaging

Untaminated 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 3109

Inland navigation (ADN) 3109

Marine transport in accordance with IMDG 3109

Air transport in accordance with IATA 3109

14.2 UN proper shipping name

Transport by land according to ADR/RID Organic peroxide type F, liquid ($\leq 17\%$ Peracetic Acid with $\leq 26\%$ Hydrogen Peroxide)

- Classification Code P1

- Label



- ADR LQ 0,125 l

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 2 (D)

Inland navigation (ADN)

Organic peroxide type F, liquid ($\leq 17\%$ Peracetic Acid with $\leq 26\%$ Hydrogen Peroxide)

- Classification Code P1

- Label



Marine transport in accordance with IMDG

Organic peroxide type F, liquid ($\leq 17\%$ Peracetic Acid with $\leq 26\%$ Hydrogen Peroxide)

- EMS

F-J, S-R

- Label



- IMDG LQ

0,125 l

Air transport in accordance with IATA

Organic peroxide type F, liquid ($\leq 17\%$ Peracetic Acid with $\leq 26\%$ Hydrogen Peroxide)

- Label

**14.3 Transport hazard class(es)**

Transport by land according to ADR/RID 5.2

Inland navigation (ADN) 5.2

Marine transport in accordance with IMDG 5.2

Air transport in accordance with IATA 5.2

14.4 Packing group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

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); 453/2010/EC; (EU) 2015/830; (EU) 2016/131

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.
Observe employment restrictions for mothers-to-be and nursing mothers.

- **VOC (2010/75/CE)** >=15%

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)

H302+H332 Harmful if swallowed or if inhaled.
H271 May cause fire or explosion; strong oxidiser.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
H242 Heating may cause a fire.
H318 Causes serious eye damage.
H314 Causes severe skin burns and eye damage.
H226 Flammable liquid and vapour.

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
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
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
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

Org. Perox. F: H242 Heating may cause a fire. (Calculation method)
Skin Corr. 1A: H314 Causes severe skin burns and eye damage. (Calculation method)
Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)
Acute Tox. 4: H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)

Modified position

none



Copyright: Chemiebüro®

