



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

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

1.1 Product identifier

Trade name : BRILLANT PROKLIKS 5 LTR.
Identification number : 64657

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

Use of the Substance/Mixture : Rinse aid
Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : tana Chemie GmbH
Rheinallee 96
55120 Mainz
Telephone : +49613196403
Telefax : +4961319642414
E-mail address : Produktsicherheit@werner-mertz.com
Responsible/issuing person
Contact person : Product development / product safety

1.4 Emergency telephone number

+49(0)6131-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Safety data sheet available on request.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
No information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

citric acid	77-92-9 201-069-1 01-2119457026-42	Eye Irrit. 2; H319	>= 2 - < 5
ethanol	64-17-5 200-578-6 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319 SCL >= 50 % 2; H319	>= 1 - < 2

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : No hazards which require special first aid measures.
- If inhaled : Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
If symptoms persist, call a physician.
- In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.
- In case of eye contact : Protect unharmed eye.
If easy to do, remove contact lens, if worn.
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No information available.
- Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Neutralize with chalk, alkali solution or ammonia.
Sweep up and shovel.
Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8., Treat recovered material as described in the section "Disposal considerations"., Refer to section 15 for specific national regulation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8. No special handling advice required. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday.



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container.
- Advice on common storage : No special restrictions on storage with other products.
- Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

- Specific use(s) : Rinse aid

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

**ethanol
64-17-5:**

- : End Use: Workers
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 1900 mg/m³
- End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 950 mg/m³
- End Use: Workers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 343 mg/kg
- End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Acute local effects
Value: 950 mg/m³
- End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Long-term systemic effects
Value: 206 mg/kg
- End Use: Consumers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

Value: 114 mg/m³

End Use: Consumers
Exposure routes: Ingestion
Potential health effects: Long-term systemic effects
Value: 87 mg/kg

End Use: Consumers
Exposure routes: Skin contact
Potential health effects: Acute local effects
Value: 950 mg/m³

PNEC

**citric acid
77-92-9:**

: Fresh water
Value: 0,44 mg/l

Marine water
Value: 0,044 mg/l

STP
Value: > 1000 mg/l

Fresh water sediment
Value: 34,6 mg/kg

Marine sediment
Value: 3,46 mg/kg

Soil
Value: 33,1 mg/kg

**ethanol
64-17-5:**

: Fresh water
Value: 0,96 mg/l

Marine water
Value: 0,79 mg/l

Fresh water sediment
Value: 3,6 mg/kg

Soil
Value: 0,63 mg/kg

STP
Value: 580 mg/l

intermittent release
Value: 2,75 mg/l

8.2 Exposure controls

Personal protective equipment



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

Eye protection : not required under normal use

Hand protection

Material : not required under normal use

For prolonged or repeated contact use protective gloves.
Chemical resistant gloves made of butyl rubber or nitrile rubber
category III according to EN 374-1: 2003 (0,4 mm).

Remarks : Take note of the information given by the producer concerning
permeability and break through times, and of special workplace
conditions (mechanical strain, duration of contact).

Skin and body protection : not required under normal use

Respiratory protection : not required under normal use

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : characteristic

Odour Threshold : No data available

pH : ca. 2,6, at20 °C

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Burning rate : No data available

Lower explosion limit : No data available

Upper explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

Relative density	: No data available
Density	: ca. 1,013 g/cm ³ at 20 °C
Water solubility	: soluble
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions., No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

Hazardous decomposition products : No hazardous decomposition products are known.
Other information : No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

Product

- Skin corrosion/irritation : According to the classification criteria of the European Union, the product is not considered as being a skin irritant.
- Serious eye damage/eye irritation : According to the classification criteria of the European Union, the product is not considered as being an eye irritant.
- Respiratory or skin sensitisation : No data available
- Further information : No data available

Components:

citric acid

77-92-9:

- Acute oral toxicity : LD50 Oral Mouse: 5.400 mg/kg
Method: OECD Test Guideline 401
- LD50 Oral Rat: 11.700 mg/kg
Method: OECD Test Guideline 401
- LD50 Oral Mouse: 5.000 mg/kg
- LD50 Oral Rat: 3.000 mg/kg
- Acute dermal toxicity : LD50 Dermal Rat: > 2.000 mg/kg
- Acute toxicity (other routes of administration) : see user defined free text Rat: 725 mg/kg
Application Route: see user defined free text
- see user defined free text Mouse: 940 mg/kg
Application Route: see user defined free text
- Skin corrosion/irritation : Result: Mild skin irritation
- Serious eye damage/eye irritation : Result: Eye irritation
- Respiratory or skin sensitisation : Result: Does not cause skin sensitisation.
- Carcinogenicity - Assessment : Not classifiable as a human carcinogen.
- Repeated dose toxicity : Rat: NOAEL: 4.000 mg/kg
LOAEL: 8.000 mg/kg
Application Route: Oral
Exposure time: 10 d



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

ethanol

64-17-5:

- Acute oral toxicity : LD50 Oral Rat: 10.470 mg/kg
Method: OECD Test Guideline 401
- LD50 Rat: 5.000 mg/kg
Method: OECD Test Guideline 401
- Acute inhalation toxicity : LC50 Rat: 51 mg/l
Exposure time: 4 h
- Acute dermal toxicity : LD50 Dermal Rabbit: > 2.000 mg/kg
Method: OECD Test Guideline 402
- LD50 Dermal Rabbit: > 10.000 mg/kg
Method: OECD Test Guideline 402
- Skin corrosion/irritation : Species: Rabbit
Result: No skin irritation
Method: OECD Test Guideline 404
- Serious eye damage/eye irritation : Species: Rabbit
Result: Mild eye irritation
Method: OECD Test Guideline 405
- Respiratory or skin sensitisation : Species: Mouse
Result: Does not cause skin sensitisation.
Method: see user defined free text
- Reproductive toxicity : Species: Rat
Application Route: Oral
NOAEL: 5.200 mg/kg
- Species: Rat
Application Route: Oral
NOAEL: 13.800 mg/kg
- Species: Rat
Application Route: Inhalation
NOAEL: 30400 mg/m3
- Repeated dose toxicity : Rat, male: NOAEL: > 20 mg/kg
Method: OECD Test Guideline 403
- Rat, female: NOAEL: 1.730 mg/kg
Method: OECD Test Guideline 408



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

SECTION 12: Ecological information

12.1 Toxicity

Components:

citric acid

77-92-9:

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 440 - 760 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 1.535 mg/l
Exposure time: 24 h

EC50 (Daphnia magna (Water flea)): ca. 120 mg/l
Exposure time: 72 h
- Toxicity to algae : NOEC (Scenedesmus quadricauda (Green algae)): 425 mg/l
Exposure time: 8 Days
Test Type: static test
- Toxicity to bacteria : (Pseudomonas putida): > 10.000 mg/l
Exposure time: 16 h

ethanol

64-17-5:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 13 g/l
Exposure time: 96 h
Method: OECD Test Guideline 203

LC50 (Leuciscus idus (Golden orfe)): 8.150 mg/l
Exposure time: 48 h

LC50 (Pimephales promelas (fathead minnow)): > 0,1 g/l
Exposure time: 96 h

LC50 (Fish): 11.200 mg/l
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 12.340 mg/l
Exposure time: 48 h

EC50 : 5.012 mg/l
- Toxicity to algae : EC50 (Chlorella vulgaris (Fresh water algae)): 275 mg/l
Exposure time: 72 h
Test Type: Growth inhibition
Method: OECD Test Guideline 201

EC50 (Scenedesmus capricornutum (fresh water algae)): 12.900 mg/l
Exposure time: 48 h
Test Type: Growth inhibition
Method: No information available.



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

EC0 (Scenedesmus quadricauda (Green algae)): 5.000 mg/l
Exposure time: 168 h

EC50 : 4.432 mg/l

EC10 : 11,5 mg/l

EC10 : 280 mg/l

Toxicity to bacteria : EC50 (Pseudomonas putida): 11.800 mg/l
Exposure time: 16 h
Test Type: Cell multiplication inhibition test

12.2 Persistence and degradability

Components:

citric acid

77-92-9:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 97 %
Exposure time: 28 d
Method: OECD 301 B

Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 19 d
Method: OECD 301 E

Biochemical Oxygen Demand (BOD) : 526 mg/g

Chemical Oxygen Demand (COD) : 728 mg/g

ThOD : 0,75 g/g

ethanol

64-17-5:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 97 %
Method: OECD Test Guideline 301

12.3 Bioaccumulative potential

Components:

citric acid

77-92-9:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: -1,72

ethanol



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

64-17-5:

Bioaccumulation : Concentration: 3,2 mg/l

Partition coefficient: n-octanol/water : log Pow: -0,32

12.4 Mobility in soil

Components:

ethanol

64-17-5:

Distribution among environmental compartments : Koc: 1Remarks: Highly mobile in soils

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

Components:

citric acid

77-92-9:

Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).. This substance is not considered to be very persistent and very bioaccumulating (vPvB)..

12.6 Other adverse effects

Product:

Additional ecological information : There is no data available for this product.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging : Empty remaining contents.
Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste Code : European Waste Catalogue
200129
According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

SECTION 14: Transport information

14.1 UN number

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.2 Proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.4 Packing group

ADR

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

14.5 Environmental hazards

ADR

Not dangerous goods

IMDG

Not regulated as a dangerous good

IATA

Not dangerous goods

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

For personal protection see section 8.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. TA Luft List (Germany)	: Not applicable : Total dust: Not applicable : Inorganic substances in powdered form: Not applicable : Inorganic substances in vapour or gaseous form: : portionClass 3: < 0,01 % : Organic Substances: Not applicable : Carcinogenic substances: Not applicable : Mutagenic: Not applicable : Toxic to reproduction: Not applicable
Volatile organic compounds (VOC) content	: Percent volatile: 1,94 % 19,59 g/l VOC content valid only for coating materials used on wood surfaces
Volatile organic compounds (VOC) content	: Percent volatile: 1,94 % 64,3 g/l VOC content excluding water
according to Detergents Regulation EC 648/2004	: 15 - <30% Non-ionic surfactants, <5% Anionic surfactants
GISBAU (D)	: no assignment possible

15.2 Chemical safety assessment

SECTION 16: Other information

Full text of H-Statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.

Further information

Classification procedure: Calculation method

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good



BRILLANT PROKLIKS 5 LTR.

WM 1114266

Order number: 0714266

Version 3.3

Revision Date 28.06.2018

Print Date 20.08.2019

Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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.

50000004578