

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

**Product name**

Solar 2in1 Cleaner + Protector

<https://my.chemius.net/p/j40wJE/en/pd/en>

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

**Relevant identified uses**

Cleaning agent. General use. Professional use.

**Uses advised against**

No information.

### 1.3 Details of the supplier of the safety data sheet

**Supplier**

CeNano GmbH & Co. KG  
Paul-Huber-Str. 5  
84405 Dorfen, Germany  
0049 8081 952530  
mike.friedrich@cenano.de

### 1.4 Emergency Telephone Number

**Emergency**

111

**Supplier**

Poison centre in Berlin (Giftnotruf Berlin): +49 (0)30 30686 700

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 (CLP)**

According to the regulation, the chemical is not classified as hazardous.

### 2.2 Label elements

**Labelling according to Regulation (EC) No 1272/2008 (CLP)**

Not subject to labelling according to Regulation (EC) 1272/2008.

### 2.3 Other hazards

**PBT/vPvB**

No information.

**Endocrine disrupting properties**

The product does not contain substances with the potential for endocrine disorders.

**Additional information**

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. The mixture does not contain substances that are included in the list of substances with endocrine disrupting properties established in accordance with Article 59 of the REACH Regulation, in a concentration  $\geq 0.1$  w/w %. The mixture does not contain substances identified as substances with

endocrine disrupting properties according to the criteria of Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605, in a concentration  $\geq 0.1$  w/w %.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

For mixtures see 3.2.

### 3.2 Mixtures

The product does not contain dangerous substances or ingredients, which would need to be declared on the safety data sheet.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General notes

When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician.

#### Following inhalation

Remove patient to fresh air - move out of dangerous area. Keep at rest in a position comfortable for breathing. If symptoms develop and persist, seek medical attention.

#### Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. If symptoms develop and persist, seek medical attention.

#### Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

#### Following ingestion

In case of doubt or if feeling unwell seek medical help.

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

#### Following inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

#### Following skin contact

Contact with skin may cause irritation (redness, itching).

#### Following eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

#### Following ingestion

May cause abdominal discomfort. May cause nausea/vomiting and diarrhea.

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

Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

#### Unsuitable extinguishing media

No information.

### 5.2 Special hazards arising from the substance or mixture

#### Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

### 5.3 Advice for firefighters

#### **Protective actions**

In case of fire or heating do not breathe fumes/vapours.

#### **Special protective equipment for fire-fighters**

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

#### **Additional information**

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

#### **For non-emergency personnel**

##### **Protective equipment**

Use personal protective equipment (Section 8). Use breathing protection against effects of steam/dust/aerosol.

##### **Precautionary measures**

Ensure adequate ventilation.

##### **Emergency procedures**

No action shall be taken involving any personal risk or without suitable training. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing. Do not touch or walk through spilled material.

#### **For emergency responders**

Use personal protective equipment.

### 6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

### 6.3 Methods and material for containment and cleaning up

#### **For containment**

Stem the spill if this does not pose risks.

#### **For cleaning up**

Ventilate the premises. Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. In case of bigger spill, dam the spillage, pump the liquid into appropriate labelled containers, absorb the residue with absorbent material and dispose of according to local regulations. Dispose in accordance with applicable regulations (see Section 13).

#### **Other information**

See Section 7: HANDLING AND STORAGE.

### 6.4 Reference to other sections

See also sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### **Protective measures**

##### **Measures to prevent fire**

Ensure adequate ventilation.

##### **Measures to prevent aerosol and dust generation**

Avoid formation of aerosols. Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

**Measures to protect the environment**

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

**Other measures**

No information.

**Advice on general occupational hygiene**

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Avoid contact with skin, eyes and clothes. Product that has been spilt and becomes wet can present a hazardous, slippery surface. Wear suitable protective equipment; see Section 8.

## 7.2 Conditions for safe storage, including any incompatibilities

**Technical measures and storage conditions**

Store in accordance with local regulations. Keep in well closed containers. Keep in a cool, dry and well ventilated place. Store at:  $\leq 40^{\circ}\text{C}$ . Protect from cold (prevent freezing). Keep away from food, drink and animal feeding stuffs.

**Packaging materials**

The original container of producer.

**Requirements for storage rooms and vessels**

Close opened containers after use. Put the containers upright to prevent from leaking.

**Storage temperature**

No information.

**Storage class**

No information.

**Further information on storage conditions**

No information.

## 7.3 Specific end use(s)

**Recommendations**

No information.

**Industrial sector specific solutions**

No information.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

**Occupational Exposure limit values**

No information.

**Information on monitoring procedures**

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

**DNEL/DMEL values****For product**

No information.

**For components**

No information.

**PNEC values****For product**

No information.

**For components**

No information.

## 8.2 Exposure controls

**Appropriate engineering control****Substance/mixture related measures to prevent exposure during identified uses**

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not breathe vapours/aerosols. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Avoid prolonged and repeated contact with skin.

#### Structural measures to prevent exposure

No information.

#### Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse.

#### Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

#### Personal protective equipment

##### Eye and face protection

Safety glasses are recommended during refilling. Safety glasses with side protection (BS EN ISO 16321-1:2022).

##### Hand protection

In case of prolonged exposure, wear protective gloves (EN 374). The penetration time is determined by the protective glove manufacturer and must be observed. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately. Protect hands with barrier cream.

#### Appropriate materials

##### Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2022).

##### Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (BS EN 136) with filter A2-P2 (BS EN 14387).

##### Thermal hazards

No information.

#### Environmental exposure controls

##### Substance/mixture related measures to prevent exposure

No information.

##### Instruction measures to prevent exposure

No information.

##### Organisational measures to prevent exposure

No information.

##### Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Important health, safety and environmental information

Physical state	liquid
Shape	No information.
Colour	colourless yellowish
Odour	characteristic
Odour threshold	No information.
Melting/freezing point or softening point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.

Lower and upper explosion limit	No information.
Flash point	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	9.9
Viscosity	No information.
Solubility (Water)	miscible
Partition coefficient n-octanol/water (log value)	No information.
Vapour pressure	No information.
Density	ca. 1 g/cm <sup>3</sup> at 20 °C
Relative vapour/gas density	No information.
Particle characteristics	No information.

## 9.2 Other information

### Information with regard to physical hazard classes

No information.

### Other safety characteristics

No information.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under recommended transport or storage conditions.

### 10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions. To avoid thermal decomposition do not overheat.

### 10.3 Possibility of hazardous reactions

The product is stable under recommended storage and handling conditions.

### 10.4 Conditions to avoid

No special precautions required. Consider the directions for use and storage.

### 10.5 Incompatible materials

Strong acids.  
Strong bases. Strong oxidising agents.  
Reducing agents.

### 10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### (a) Acute toxicity

No information.

#### Additional information

The product is not classified as acutely toxic.

**(b) Skin corrosion/irritation**

No information.

**Additional information**

The product is not classified as irritating to the skin.

**(c) Serious eye damage/irritation**

No information.

**Additional information**

The product is not classified as an irritant to the eyes.

**(d) Respiratory or skin sensitisation**

No information.

**Additional information**

The product is not classified as sensitising.

**(e) (Germ cell) mutagenicity**

No information.

**(f) Carcinogenicity**

No information.

**(g) Reproductive toxicity**

No information.

**Summary of evaluation of the CMR properties**

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

**(h) STOT-single exposure**

No information.

**Additional information**

STOT SE (single exposure): Not classified.

**(i) STOT-repeated exposure**

No information.

**Additional information**

STOT RE (repeated exposure): Not classified.

**(j) Aspiration hazard**

No information.

**Additional information**

Aspiration hazard: Not classified.

**Symptoms related to the physical, chemical and toxicological characteristics**

No information.

**Interactive effects**

No information.

**11.2 Information on other hazards****Endocrine disrupting properties**

The product does not contain substances with the potential for endocrine disorders.

**Other information**

No information.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity****Acute (short-term) toxicity**

No information.

**Chronic (long-term) toxicity**

No information.

## 12.2 Persistence and degradability

**Abiotic degradation, physical- and photo-chemical elimination**

No information.

**Biodegradation**

No information.

**Additional information**

Biodegradable. The product has not been tested.

## 12.3 Bioaccumulative potential

**Partition coefficient n-octanol/water (log value)**

No information.

**Bioconcentration factor (BCF)**

No information.

## 12.4 Mobility in soil

**Known or predicted distribution to environmental compartments**

No information.

**Surface tension**

No information.

**Adsorption/Desorption**

No information.

## 12.5 Results of PBT and vPvB assessment

No evaluation.

## 12.6 Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

## 12.7 Other adverse effects

No information.

## 12.8 Additional information

**For product**

Product is not classified as hazardous for environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

## 13.1 Waste treatment methods

**Product / Packaging disposal****Waste chemical**

Dispose of in accordance with applicable waste disposal regulation. Dispose the product to an authorised collector/remover of waste/company performing waste recovery.

**Waste codes / waste designations according to LoW**

08 02 99 - wastes not otherwise specified

**Packaging**

Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

**Waste codes / waste designations according to LoW**

No information.

**Waste treatment-relevant information**

No information.

**Sewage disposal-relevant information**

No information.

**Other disposal recommendations**

No information.

**SECTION 14: TRANSPORT INFORMATION**

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.
14.2 UN proper shipping name			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.3 Transport hazard class(es)			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.4 Packing group			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			
Limited quantities Not given/not applicable	Limited quantities Not given/not applicable		Limited quantities Not given/not applicable
14.7 Maritime transport in bulk according to IMO instruments			
	Not given/not applicable		

**SECTION 15: REGULATORY INFORMATION**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)
  - Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

**Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)**  
not applicable

**Ingredients according to Regulation (EC) No 648/2004 on detergents**  
No information.

**Special instructions**

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION

### Indication of changes

2.2 Label elements 2.3 Other hazards 4.1 Description of first aid measures 6.3 Methods and material for containment and cleaning up 7.2 Conditions for safe storage, including any incompatibilities 9.1 Information on basic physical and chemical properties 9.2 Other information 10.5 Incompatible materials 11.2 Information on other hazards 12.3 Bioaccumulative potential 12.6 Endocrine disrupting properties 12.8 Additional information 13.1 Waste treatment methods 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

### Key literature references and sources for data

MSDS, Nanotol Auto, Boot + Freizeit 2in1 Cleaner+Protector, CeNano GmbH & Co.KG, date: 21.6.2017, version: 1.00

### Abbreviations and acronyms

ATE - Acute Toxicity Estimate  
 ADR - Agreement concerning the International Carriage of Dangerous Goods by Road  
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
 CEN - European Committee for Standardisation  
 C&L - Classification and Labelling  
 CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008  
 CAS# - Chemical Abstracts Service number  
 CMR - Carcinogen, Mutagen, or Reproductive Toxicant  
 CSA - Chemical Safety Assessment  
 CSR - Chemical Safety Report  
 DMEL - Derived Minimal Effect Level  
 DNEL - Derived No Effect Level  
 DPD - Dangerous Preparations Directive 1999/45/EC  
 DSD - Dangerous Substances Directive 67/548/EEC  
 DU - Downstream User  
 EC - European Community  
 ECHA - European Chemicals Agency  
 EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)  
 EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)  
 EEC - European Economic Community  
 EINECS - European Inventory of Existing Commercial Substances  
 ELINCS - European List of notified Chemical Substances  
 EN - European Standard  
 EQS - Environmental Quality Standard  
 EU - European Union  
 Euphrac - European Phrase Catalogue  
 EWC - European Waste Catalogue (replaced by LoW – see below)  
 GES - Generic Exposure Scenario  
 GHS - Globally Harmonized System  
 IATA - International Air Transport Association  
 ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
 IMDG - International Maritime Dangerous Goods  
 IMSBC - International Maritime Solid Bulk Cargoes  
 IT - Information Technology  
 IUCLID - International Uniform Chemical Information Database  
 IUPAC - International Union for Pure Applied Chemistry  
 JRC - Joint Research Centre  
 Kow - octanol-water partition coefficient  
 LC50 - Lethal Concentration to 50 % of a test population  
 LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
 LE - Legal Entity  
 LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
 LR - Lead Registrant  
 M/I - Manufacturer / Importer  
 MS - Member States  
 MSDS - Material Safety Data Sheet  
 OC - Operational Conditions  
 OECD - Organization for Economic Co-operation and Development  
 OEL - Occupational Exposure Limit

OJ - Official Journal  
OR - Only Representative  
OSHA - European Agency for Safety and Health at work  
PBT - Persistent, Bioaccumulative and Toxic substance  
PEC - Predicted Effect Concentration  
PNEC(s) - Predicted No Effect Concentration(s)  
PPE - Personal Protection Equipment  
(Q)SAR - Qualitative Structure Activity Relationship  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006)  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
RIP - REACH Implementation Project  
RMM - Risk Management Measure  
SCBA - Self-Contained Breathing Apparatus  
SDS - Safety data sheet  
SIEF - Substance Information Exchange Forum  
SME - Small and Medium sized Enterprises  
STOT - Specific Target Organ Toxicity  
(STOT) RE - Repeated Exposure  
(STOT) SE - Single Exposure  
SVHC - Substances of Very High Concern  
UN - United Nations  
vPvB - Very Persistent and Very Bioaccumulative

**List of relevant H phrases**

No information.



- Provided correct labelling of the product
- Compliance with the local legislation
- Provided correct classification of the product
- Provided adequate transport data

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*The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.*