

## Safety Data Sheet according to RL 1907/2006 (REACH)

### Clock 859

Article No.: TS5100

Document-No.: S0464

Edition: 3

Revision date / Print date:

Preparation date: 2023-04-28

Side: 1 of 11

2023-05-09

Replaces Edition 2

## 1. Identification of the substance/mixture and of the company

### 1.1 Product identifier:

Identification of the substance: Clock 859

Hazard-determining components of labelling: None

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

Relevant identified uses: Industrial use. Lubricant.

Uses advised against: At this moment we have not identified any uses advised against.

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

Dr. Tillwich GmbH Telephone.: +49 (0) 7451 5386-0  
Werner Stehr  
Murber Steige 26  
D-72160 Horb, Germany

Qualified person responsible for the safety data sheet: Department occupational health and safety  
E-mail qualified person: [sicherheit@tillwich-stehr.com](mailto:sicherheit@tillwich-stehr.com)

### 1.4 Emergency telephone number:

| Name              | Place | Emergency call      | Mail   | Availability                   |
|-------------------|-------|---------------------|--|--------------------------------|
| Dr. Tillwich GmbH | Horb  | +49 (0) 7451 5386-0 | <a href="mailto:sicherheit@tillwich-stehr.com">sicherheit@tillwich-stehr.com</a> | 8.00 am until 5.00 pm UTC + 1h |
| Dr. Tillwich GmbH | Horb  | +49 (0) 171-5477230 |  | 5.00 pm until 8.00 am UTC + 1h |
|                   |       |                     |  |                                |

## 2. Hazards identification

### 2.1 Classification of the substance or mixture:

Hazard class / hazard warnings: None.

Precautionary Statements - Prevention: None.

Precautionary Statements Storage: None.

### 2.2 Label elements:

Pictograms: None.

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Signal word: None.

**The product is not a hazardous substance / mixture.  
It does not contain any hazardous ingredients above the consideration limits.**

Classification according to GHS.

#### 2.3 Other hazards:

Results of PBT and vPvB assessment:

According to the results of the assessment of the individual components, this mixture contains neither a PBT nor a vPvB substance.

**According to REACH regulation 1907/2006, article 31, no safety data sheet is required for this product.**

### 3. Composition / information on ingredients

#### 3.1 Substance:

#### 3.2 Mixtures:

Characterisation: Synthetic esters with additives.

The ingredients are not dangerous or are below the Consideration limit.

Classification according to EU directives and national law in the current versions.

### 4. First aid measures

#### 4.1 Description of first aid measures:

Skin contact: Remove contaminated clothing. After contact with skin, wash immediately with plenty of water and soap. After work wash hands with water and soap.

Eye contact: Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Immediately call a physician.

Inhalation: Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Ingestion: If swallowed, do not induce vomiting: seek medical advice.

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

None.

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

None.

### 5. Firefighting measures

**5.1 Extinguishing media:** CO<sub>2</sub> – foam or powder, water spray, alcohol resistant foam.  
Cool containers with water in case of fire.

Unsuitable extinguishing Media: Water jet

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

In the thermal decomposition toxic gases may be create.

Carbon oxides.

Exposure to decomposition products may cause a health hazard.

Do not empty contaminated water into drains, ground and lakes or rivers.

Hazardous combustion products:

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

#### 5.3 Advice for firefighters:

Wear self-contained breathing apparatus and tightly closing protective suit.

### 6. Accidental release measures

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

Avoid contact with skin, eyes and clothes.

#### 6.2 Environmental precautions:

Do not empty the product into drains, ground and waters.

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

Cover with inorganic absorbent material. The material must be disposed of as hazardous waste.

Clean contaminated objects and the floor thoroughly, observing environmental regulations.

#### 6.4 Reference to other sections:

Hazardous combustion products: see section 5

Personal protective equipment: see section 8

Incompatible materials: see section 10

Disposal considerations: see section 13

### 7. Handling and storage

#### 7.1 Precautions for safe handling:

Do not eat, drink or smoke when using this product. Keep away from food and drink.

Keep container tightly closed when not in use.

Measures to protect the environment:

Prevent emission into environment.

#### 7.2 Conditions for safe storage, including any incompatibilities:

Keep only in the original container, protected from light and heat. Storing large quantities in approved drip pans with sufficient volume.

Avoid contact with oxidizing agent. Keep away from inflammable materials and fluids.

Recommended storage temperature : 15° C - 25° C.

#### 7.3 Specific end uses:

No information available.

### 8. Exposure contrals / personal protection

#### 8.1 Control parameters:

Components with workplace-related limit values to be monitored:

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|   |                    |  |
|---|--------------------|--|
| AWG Threshold limit value (Germany)<br>IOELV (European Union) | No data available. |  |
| BWG Biological threshold limit value (Germany)                | No data available. |  |

#### Information

AGW: The workplace limit value is a time-weighted average concentration of a substance in the air at the workplace at which acute or chronic damage to the health of employees is not to be expected.

BGW: The biological limit value is a limit value for the concentration of a substance, its metabolite (metabolic product) or an exposure indicator in the biological material of an employee.

#### DNEL-Values Derived No Effect Level / Derived Minimal Effect Level (DMEL)

|                              |      |                    |
|------------------------------|------|--------------------|
| Longterm – Systemic effects  |      |                    |
| Dermal                       | DNEL | No data available. |
| Inhalation                   | DNEL | No data available. |
| Longterm – Local effects     |      |                    |
| Inhalation                   | DNEL | No data available. |
| Shortterm – Systemic effects |      |                    |
| Inhalation                   | DNEL | No data available. |
| Shortterm – Local effects    |      |                    |
| Inhalation                   | DNEL | No data available. |

#### PNEC-Values Predicted No Effect Concentration

|                        |                    |
|------------------------|--------------------|
| Soil                   | No data available. |
| Sewage treatment plant | No data available. |
| Marine water           | No data available. |
| Marine water sediment  | No data available. |
| Fresh water            | No data available. |
| Fresh water sediment   | No data available. |
| Sporadic release       | No data available. |

Technical precautions to avoid exposition on the job:  
 Ensure adequate ventilation, especially in confined areas. Draw off vapours.

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#### 8.2 Limitation and monitoring of exposure:

General protective and hygiene measures:

When using do not eat, drink or smoke.

Keep away from food, drink and animal food.

Take off all contaminated clothing immediately.

Wash hands before breaks and at end of work.

Avoid contact with skin and eyes.

Regular cleaning of equipment and at work area.

Eye/face protection:

Use safety goggles with side protection.

Skin Protection:

After work wash hands with water and soap.

Preventive skin protection required - Use protective hand lotion or wear suitable gloves from oil resistant material. Avoid longer and intensive skin contact.

Suitable gloves according EN 374:

Material: Nitrile rubber

Category: III

Thickness: 0,4 mm

Permeation time: Level 4 (> 120 min.)

The data were determined on laboratory conditions. The conditions in practical application can deviate. The data can only be a guideline, assisting to select the suitable gloves.

Contaminated gloves should be changed as fast as possible.

Respiratory protection:

Not necessary at room temperature.

Body protection:

Wear suitable protective clothing.

Other protective measures:

The usual precautionary measures for handling chemicals should be observed.

Environmental exposure controls:

Keep away from drains, surface and ground water. Prevent from entering drainage system.

Avoid subsoil penetration.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

|                                |                    |
|--------------------------------|--------------------|
| Physical state:                | liquid             |
| Colour:                        | light yellow       |
| Odour:                         | like ester         |
| Odour threshold:               | No Data available. |
| Melting point/freezing point:  | - 15 °C            |
| Boiling point / Boiling range: | No data available. |
| Flammability:                  | Not applicable.    |

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|  |                        |                      |
|--|------------------------|----------------------|
| Explosion limit:                                       |                        |                      |
| lower  | Not applicable.        | upper Not applicable |
| Flash point:   |                        | > 240°C              |
| Ignition point:  |                        | No data available.   |
| Decomposition temperature:                             |                        | No data available.   |
| pH-value:  |                        | No data available.   |
| Viscosity at 20°C:                                     | 150 mm <sup>2</sup> /s | DIN51562             |
| Water solubility at 20°C:                              | insoluble              |                      |
| Partition coefficient<br>n-octanol/ water (log-value): | No data available.     |                      |
| Soil organic carbon / water<br>(log KOC):              | No data available.     |                      |
| Vapour pressure:                                       | No data available.     |                      |
| Density (20°C):  | 0,97 g/cm <sup>3</sup> |                      |
| Relative vapour density:                               | Not applicable.        |                      |
| Particle characteristics:                              | Not applicable.        |                      |

#### 9.2 Other Information:

Explosiveness:  
None.

Oxidizing properties:  
Not oxidizing.

### 10. Stability and reactivity

#### 10.1 Reactivity:

No decomposition if used according to specifications.

#### 10.2 Chemical stability:

The product is stable under normal ambient.

#### 10.3 Possibility of hazardous reactions:

Avoid contact with oxidizing agent and inflammable materials.

#### 10.4 Conditions to avoid:

Keep away from heat, hot surfaces, ignition sources and sunlight.

#### 10.5 Incompatible materials:

Oxidizing agent.

#### 10.6 Hazardous decomposition products:

In case of fire - Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

### 11. Toxicological information

#### 11.1 Information on toxicological effects:

Acute toxicity:

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Acute oral toxicity LD<sub>50</sub>: > 2000 mg/kg, rat. Method OECD 401.

Acute dermal toxicity LD<sub>50</sub>: > 2000 mg/kg, rabbit. Method OECD 402.

Acute inhalational toxicity LD<sub>50</sub>: No data available.

#### **Irritation:**

##### **Skin:**

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

##### **Eyes:**

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

##### **Respiratory or skin sensitisation:**

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

##### **CMR-Effects:**

##### **Carcinogenicity:**

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

##### **Mutagenität:**

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

##### **Reproductive toxicity:**

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

##### **Specific target organ toxicity – single exposure:**

No data available.

##### **Specific target organ toxicity – repeated exposure:**

No data available.

##### **Aspiration hazard:**

No data available.

##### **Other Information (absorption, inhalation, ingestion):**

No further data available.

#### **11.2 Endocrine disrupting properties:**

The ingredients are not listed.

#### **11.3 Information about other Hazards:**

No additional information.

## **12. Ecological Information**

### **12.1 Toxicity:**

#### **Acute fish toxicity:**

There are no toxicological test data available.

#### **Acute Daphnia Toxicity:**

There are no toxicological test data available.

#### **Acute Alga Toxicity:**

There are no toxicological test data available.

#### **Acute bacteria Toxicity:**

There are no toxicological test data available.

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#### Soil organisms:

There are no toxicological test data available.

#### 12.2 Persistence and degradability:

##### Persistence:

No data available.

##### Biological Degradability:

The product is partially biodegradable.

#### 12.3 Bioaccumulative potential:

No data available.

#### 12.4 Mobility in soil:

No data available.

#### 12.5 Results of PBT and vPvB assessment:

According to the results of the assessment of the individual components, this mixture contains neither a PBT nor a vPvB substance.

#### 12.6 Endocrine disrupting properties:

The ingredients are not listed.

#### 12.7 Other adverse effects:

If handled and used properly, no environmental problems are to be expected.  
Do not discharge into ground or waters.

### 13. Disposal considerations

#### 13.1 Waste treatment methods:

This material and its container must be disposed of as hazardous waste.

Product:

EWC - Code: (European waste category list): 13 02 06\*.  
synthetic machine, gear and lubricating oils.

Package:

EWC - Code: (European waste category list): 15 01 10\*  
contaminated package.

The allocation of the waste keys is to be accomplished branch and process specifically by the waste producer separately. The indicated waste keys are only recommendations for the disposal of the unmachined product.

### 14. Transport information

**The product is not dangerous.**

#### 14.1 UN number.:

#### 14.2 UN proper shipping name:

ADR  
IMDG  
ICAO-TI



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#### 14.3 Transport hazard class:

|              |  |  |
|--------------|--|--|
| ADR / RID    |  |  |
| unclassified |  |  |
| IMDG         |  |  |
| unclassified |  |  |
| ICAO-TI      |  |  |
| unclassified |  |  |

#### 14.4 Packing group:

#### 14.5 Environmental hazards:

#### 14.6 Special precautions for user:

None.

#### 14.7 Carriage in bulk by sea in accordance with IMO instruments:

The cargo is not intended to be carried in bulk.

#### 14.8 Information according to UN model regulations:

Quantities exempt:

Limited Stock (LQ):

Transport category:

Tunnel registration:

UN „Model Regulation“:

### 15. Regulatory information

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

Classification and labeling according to EC No. 1272/2008.

The product is classified and labeling to GHS.

#### **REACH, Annex XIV - Substances of Very High Concern / SVHC – candidate list.**

The components are not listed.

#### **Directive 1005/2009 - Substances that Deplete the Ozone Layer (ODS)**

Not applicable.

Atmospheric half time:

Global Warming Potential (GWP):

#### **Directive 2019/1021 Persistent Organic Pollutants (POP)**

The components are not listed.

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#### Information about limitation of use:

Employment restrictions concerning juveniles: § 22 JArbSchG.

Observe employment restrictions for mothers: § 11 MuSchG.

Classification according to the Operational Safety Ordinance Germany (BetrSichV): None.

#### Waterhazard class:

WGK 1: slightly hazardous for water.

#### Storage of hazardous substances in portable containers according to TRGS 510:

Not applicable.

#### National regulations Switzerland:

##### Ordinance on the Incentive Tax on Volatile Organic Compounds (VOCV)

Not applicable.

#### Other regulation:

Note Directive 98/24 / EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

#### Training advice:

Provide adequate information, instruction and training for operators.

Special Information::

-

#### 15.2 Chemical Safety Assessment:

A Chemical Safety Assessment has not been carried out.

### 16. Additional Information

Technical information based on a safety data sheet according to EC 1907/2006.

See notes in section 2.2 and 2.3.

The information of this Data Sheet represents our best knowledge. This information is for security reasons only and does not contain any characteristic properties guaranteed for a specific application. Any use of the product which is not in conformance with this Data Sheet or which involves using the product in combination with any other products or processes lies within the responsibility of the user.

The product is intended for industrial transformation / use only.

#### Indication of changes:

Adaptation to Regulation (EC) No. 1907/2002 (REACH), amended with 2020/878 EU.

The data sheet has been completely redesigned.

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### Abbreviations and acronyms:

|                  |   |
|------------------|---|
| ADR              | European Agreement concerning the International Carriage of Dangerous Goods in the street         |
| AGW              | Threshold limit value (Germany)   |
| AOX              | Adsorbable organic halogen compounds  |
| AVV              | European Waste Catalogue  |
| AwSV             | German regulation on water-polluting substances   |
| BCF              | Bioconcentration factor   |
| BGW              | Biological threshold limit value (TRGS 903, Germany)  |
| BOD              | Biochemical oxygen demand   |
| CAS              | Chemical Abstracts Service  |
| CLP              | Classification, Labeling and Packaging (Directive EU-No. 1272/2008)                               |
| CMR              | Carcinogen, Mutagen, Reprotoxic   |
| COL              | Chemical oxygen demand  |
| DMEL             | Derived Minimum Effect Level  |
| DNEL             | Derived No Effect Level   |
| EC <sub>50</sub> | Median effective concentration  |
| ED <sub>50</sub> | Median effective dose   |
| ECHA             | European Chemicals Agency   |
| EINECS           | European Inventory of Existing Commercial Chemical Substances                                     |
| GHS              | Globally Harmonized System of Classification and Labeling of Chemicals                            |
| GisChem          | Hazardous substances database of the BG RCI and the BGHM.   |
| GWP              | Global Warming Potential  |
| ICAO             | International Civil Aviation  |
| IMDG-Code        | International Maritime Code for Dangerous Goods   |
| IMO              | International Maritime Organisation   |
| LC <sub>50</sub> | Median lethal concentration   |
| LD <sub>50</sub> | Median lethal dose  |
| LogPow           | Octane-water partition coefficient  |
| NOAEL            | No Observed Adverse Effect Level  |
| NOEC             | Observed Effect Concentration   |
| NOEL             | No Observed Effect Level  |
| OCP              | Ozone Depletion Potential   |
| PBT              | Persistent, Bioaccumulative and Toxic   |
| PNEC             | Predicted No Effect Concentration   |
| REACH            | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation EU-No. 1907/2006. |
| SVHS             | Substances of Very High Concern   |
| TRGS             | Technical Rules for Hazardous Substances  |
| UFI              | Unique Formula Identifier   |
| VCI              | German Chemical Industry Association e.V.   |
| VOC              | Volatile organic compounds  |
| vPvB             | very Persistent and very Bioaccumulative  |
| WGK              | Water contaminating class (Germany)   |