## 1. Identification of the Substance/Mixture and of the Company/Undertaking

**1. 1. Product Identifier**

*Product Name:* *Tinuvin® 292 HALS*

*Article No.:* --

**1. 2. Relevant identified Uses of the Substance or Mixture and Uses advised against**

*Identified uses:* *Stabilizer*

*Uses advised against:* *The product is not recommended for use in contact with mucous membranes, damaged skin, or blood; or for the manufacture of human implants, as it has not been tested for these applications.*

**1. 3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)**

*Mon-Droguiste.Com*

*39 Bis Rue Du Moulin Rouge - 10150 Charmont Sous Barbuise - France*

*+33.(0)3.25.41.04.05*

*www.mon-droguiste.com*

*contact@mon-droguiste.com*

**1. 4. Emergency No.**

*Emergency No.:* *SAMU : 15 - Pompiers : 18 - ORFILA : 01 45 42 59 59*

**1. 4. 2 Poison Center:**

## 2. Hazards Identification

**2. 1. Classification of the Substance or Mixture**

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

*Skin sensitization, hazard category 1*
*Reproductive toxicity, hazard category 2*
*Hazardous to the aquatic environment, acute hazard category 1*
*Hazardous to the aquatic environment, chronic hazard category 1*
*M-Factor: acute category 1*

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| Cat.: 1 | |
| H361f | Suspected of damaging fertility. |
| Cat.: 2 | |
| H400 | Very toxic to aquatic life. |
| Cat.: 1 | |
| H410 | Very toxic to aquatic life with long lasting effects. |
| Cat.: 1 | |

*Possible Environmental Effects:*

**2. 2. Label Elements**

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

*Hazard designation:*

GHS07-1

GHS08

GHS09

*Signal word:*

Warning

*Hazard designation:*

| | |
|---|---|
| H317 | May cause an allergic skin reaction. |
| H361f | Suspected of damaging fertility. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |

*Safety designation:*

| | |
|---|---|
| P261 | Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ clothing/ eye/ face protection. |
| P302+P352 | If on skin: Wash with soap and water. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container according to regional, national and international regulations. |

*Hazardous components for labelling:*

**2. 3. Other Hazards**

## 3. Composition/Information on Ingredients

**3. 1. Substance**

*This product is a substance: see details under 3.2.*

**3. 2. Mixture**

*Chemical Characterization:* *Preparation: based on sterically inhibited amine, light stabilizer.*
*REACH Reg. No.: 01-2119491304-40-0000*
*Reaction mass of bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and methyl-1,2,2,6,6-pentamethyl-4-piperidyl sebacate*

*Information on Components / Hazardous Ingredients:*

| | | |
|---|---|---|
| Decanedioic acid, 1, 10-bis(1,2,2,6,6-pentamethyl-4-piperinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate (H317-H361f-H400-H410) | 100 % | CAS-Nr: 1065336-91-5<br>EINECS-Nr:<br>EC-Nr: |

*Additional information:*

## 4. First Aid Measures

### 4. 1. Description of the First Aid Measures

*General information:*

*Remove contaminated clothes immediately.*

*After inhalation:*

*Supply fresh air. Consult physician if symptoms persist.*

*After skin contact:*

*Remove contaminated clothing immediately. Wash off immediately with plenty of water and soap.*
*If symptoms persist, consult a physician.*

*After eye contact:*

*Rinse open eyes with plenty of water for at least 15 minutes.*

*After ingestion:*

*Rinse mouth and give 200 - 300 ml of water to drink.*
*If symptoms persist consult physician.*

### 4. 2. Most important Symptoms and Effects, both Acute and Delayed

*Symptoms:*

*No further information available.*

*Effects:*

*No further information available.*

### 4. 3. Indication of any Immediate Medical Attention and special Treatment needed

*Treatment:*

*Symptomatic treatment (decontamination, vital functions), no specific antidote known.*

## 5. Fire-Fighting Measures

### 5. 1. Extinguishing Media

*Suitable extinguishing media:*

*Foam, extinguishing powder, water spray.*

*Unsuitable extinguishing media:*

*Never apply a strong water jet.*

### 5. 2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*In case of fire: hazardous vapors may be released. Development of fumes/aerosol.*

### 5. 3. Advice for Firefighters

*Protective equipment:*

*Wear self-contained respiratory protective device.*

*Further information:*

*Contaminated extinguishing water and debris should be disposed of according to local regulations.*

## 6. Accidential Release Measures

### 6. 1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

*Wear protective clothing.*
*Use respiratory protection.*

### 6. 2. Environmental Precautions

*Environmental precautions:*

*Keep spills and cleaning runoff out of municipal sewers and open bodies of water.*

### 6. 3. Methods and Material for Containment and Cleaning Up

*Methods and material:*

*Larger amounts should be pumped into adequate containers.*
*Small spills:*
*Contain with suitable absorbent material and dispose accordingly.*

### 6. 4. Reference to other Sections

*Protective clothing, see Section 8.*
*See Section 13 for information on disposal.*

## 7. Handling and Storage

### 7. 1. Precautions for Safe Handling

*Instructions on safe handling:*

*Provide adequate ventilation.*
*Avoid contact with eyes, skin and clothing.*
*Product is to be used by trained and qualified personnel only, to avoid or minimize exposure.*

*Hygienic measures:*

### 7. 2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

*Store in tightly sealed containers in a cool and well ventilated location.*

*Requirements for storage areas and containers:*

*The packed product is not sensitive to frost or low temperatures.*

*Information on fire and explosion protection:*

*Take measures to prevent electrostatic discharge.*

*Storage class:*

*10; Combustible liquids (TRGS 510, Storage of hazardous materials in transportable containers)*

*Further Information:*

### 7. 3. Specific End Use(s)

*Further information:*

## 8. Exposure Controls/Personal Protection

### 8. 1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*No occupational exposure limits known.*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*1.27 mg/m3 (worker, inhalation, long-term exposure - systemic effects)*
*1.8 mg/m3 (worker, skin contact, long-term exposure - systemic effects)*
*0.31 mg/m3 (consumer, skin contact, long-term exposure - systemic effects)*
*0.9 mg/m3 (consumer, inhalation, long-term exposure - systemic effects)*
*0.18 mg/m3 (consumer, swallowing, long-term exposure - systemic effects)*

*PNEC (Predicted No-Effect Concentration):*

*Fresh water: 0.0022 mg/l*
*Seawater: 0,00022 mg/l*
*Sporadic release: 0.009 mg/l*
*Fresh water sediment: 1.05 mg/kg*
*Seawater sediment: 0.11 mg/kg*
*Soil: 0.21 mg/kg*
*Sewage treatment system (STP): 1 mg/l*

*Additional Information:*

### 8. 2. Exposure Controls

*Technical protective measures:*

*Provide adequate ventilation.*

*Personal Protection*

*General protective measures:*

*The usual precautionary measures are to be adhered to when handling chemicals.*

*Respiratory protection:*

*Suitable respiratory protection for low concentrations or short-term exposure: Gas filter for organic gases/vapors (boiling point > 65° C, e.g., EN 14387 Type A)*

*Hand protection:*

*Chemical protective gloves (EN 374 (Europe), F739 (US)).*
*The manufacturer´s directions for use should be observed because of the great diversity of types.*

*Protective glove material:*

*Recommended: Protective index 6, corresponding > 480 min. of permeation time according to EN 374.*
*Nitrile rubber (480 min, 0.4 mm)*

*Eye protection:*
*Safety glasses with protective shields (EN 166).*

*Body protection:*
*Protective clothing, chemical resistant.*

*Environmental precautions:*
*Do not allow entering sewerage system.*

## 9. Physical and Chemical Properties

### 9. 1. Information on Basic Physical and Chemical Properties

| | |
|---|---|
| *Form:* | *liquid* |
| *Color:* | *bright yellow* |
| *Odor:* | *like ester* |
| *Odor threshold:* | *no information available* |
| *pH-Value:* | *8.4 (1%(m), 20-25°C)* |
| *Melting temperature:* | *-57.8°C (1013 hPa)* |
| *Boiling temperature:* | *> 300°C (1013 hPa)* |
| *Flash point:* | *209.5°C (DIN 51758)* |
| *Evaporation rate:* | *No information available.* |
| *Flammability (solid, gas):* | *not applicable* |
| *Upper explosion limit:* | *not applicable* |
| *Lower explosion limit:* | *not applicable* |
| *Vapor pressure:* | *0.0001 Pa (20°C; OECD 104)* |
| *Vapor density:* | *No information available.* |
| *Density:* | *0.993 g/cm3 (20°C; OECD 109)* |
| *Solubility in water:* | *21 - 30 mg/l (23°C; OECD 105)* |
| *Coefficient of variation (n-Octanol/Water):* | *2.3-2.8 logKOW (25°C, pH 7)* |
| *Auto-ignition temperature:* | *Product is not auto-ignitable.* |
| *Decomposition temperature:* | *325°C* |

*No decomposition if used according to specifications.*

*Viscosity, dynamic:* *400 mPa.s (20°C)*

*Explosive properties:*

*Product does not present an explosion hazard.*

*Oxidizing properties:*

*not oxidizing*

*Bulk density:*

*not determined*

**9. 2. Further Information**

*Solubility in solvents:*

*Miscible with organic solvents.*

*Viscosity, kinematic:* *478 mm2/s (20°C)*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Particle characteristics:*
*Particle size distribution: The substance/product is placed on the market or used in a non-solid or non-granular state.*

*Other information:*

*Hygroscopy: not hygroscopic*
*Molar mass: 508.78 g/mol*
*Minimum ignition energy: no data available*
*Self-heating ability: This product is not self-heating.*
*Glass transition temperature: -58.8°C*
*Ignition temperature: 380°C*
*pKa: ca. 9.2 (25°C)*
*Adsorption/water - soil: KOC: 204400; log KOC: 5.31 (calculated)*
*Adsorption/water - soil: KOC: 4726; log KOC: 3.67 (calculated)*
*Thixotropy: not thixotropic*

## 10. Stability and Reactivity

**10.1. Reactivity**

*Not corrosive for metals.*

**10.2. Chemical Stability**

*Stable if used according to specifications.*

**10.3. Possibility of Hazardous Reactions**

*None if handled and stored according to specifications.*

**10.4. Conditions to Avoid**

*Conditions to avoid:*

*Avoid heat, open fire and other ignition sources.*
*Avoid electrostatic discharge.*

*Thermal decomposition:*

**10.5. Imcompatible Materials**

*Strong acids, strong bases and strong oxidizing agents.*

**10.6. Hazardous Decomposition Products**

*None if stored and handled according to specifications.*

**10.7. Further Information**

## 11. Toxicological Information

**11. 1. Information on Hazard Classes as defined in Regulation (EC) No. 1272/2008**

*Acute Toxicity*

*Moderate toxicity after single ingestion. Almost not toxic after a single skin contact.*

*LD50, oral:* *3230 mg/kg (rat)*

*LD50, dermal:* *> 3170 mg/kg*

*LC50, inhalation:*

*not determined*

*Primary effects*

*Irritant effect on skin:*

*Non irritating (rabbit)*

*Irritant effect on eyes:*

*Non-irritating to eyes (rabbit; OECD 405)*

*Inhalation:*

*No information available.*

*Ingestion:*

*No information available*

*Sensitization:*

*Sensitizing (guinea pig; OECD 406).*

*Mutagenicity:*

*Not mutagenic (Ames Test)*

*Reproductive toxicity:*

*Suspected of damaging fertility.*

*Carcinogenicity:*

*No cancerogenic effect known.*

*Teratogenicity:*

*In animal studies the substance did not cause malformations. The potential to cause toxicity to development cannot be excluded at maternally toxic doses.*

*Specific target organ toxicity (STOT):*

*No specific target organic toxicity expected after a single exposure.*

*Repeated exposure: Based on the chemical struture a neurotoxic*

*effect by repeated administration cannot be excluded. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.*

*Aspiration hazard:*

*No risk of aspiration.*

**11. 2. Information on other Hazards**

*Endocrine Disrupting Properties:*

*This substance/mixture does not contain any components with endocrine disrupting properties in a percentage of 0.1 or greater, according to Article 57(f) of the REACH Regulation (EC) No. 1907/2006 or the Delegated Regulation (EC) 2017/2100 or the Delegated Regulaton (EC) 2018/605.*

## 12. Ecological Information

**12. 1. Aquatic Toxicity**

*Toxic for aquatic organisms. Controlled release of small amounts of product in biological sewage system do not cause disorders of the biodegradablity of activated sludge.*

*The information on the toxic effects are based on the nominal concentration. The product is not very soluble in the testing medium.*

*Fish toxicity:*

*LC50: 0.9 mg/l (96h, Danio rerio; OECD 203)*

*Daphnia toxicity:*

*Chronic toxicity: NOEC: 1 mg/l (21d, Daphnia magna; OECD 211)*

*Bacteria toxicity:*

*EC50: > 100 mg/l (3h, active sludge; OECD 209)*

*Algae toxicity:*

*EC50: 1.68 mg/l (72h, Desmodesmus subspicatus; OECD 201)*

**12. 2. Persistency and Degradability**

*Not readily biodegradable.*

*Reasonably/partially biodegradable.*

*38 % DOC reduction (28d) (OECD 301F; ISO 9408; 92/69/EEC, C.4-D)*

*Assessment of stability in water: In contact with water the substance will hydrolyze slowly.*

*Information on stability in water (hydrolysis):*

*t1/2 51d (25°C, pH 7; OECD 111); t1/2 68d (25°C, pH 7; OECD 111)*

*t1/2 3.6d (25°C, pH 9; OECD 111); t1/2 2.6d (25°C, pH 9; OECD 111)*

**12. 3. Bioaccumulation**

*Accumulation in organisms is not to be expected.*

*Bioconcentration factor (BCF): < 9.7 (8d, Cyprinus carpio); < 31.4 (8d, Cyprinus carpio)*

**12. 4. Mobility**

*Does not evaporate from the surface of the water to the*

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*atmosphere.*
*Adsorption to solid soil phase is not expected.*

**12. 5. Results of PBT- und vPvP Assessment**

*According to Annex VIII to Regulation (EC) No. 1907/2006 (REACH): this product is neither a PBT (persistent/bioaccumulative/toxic) or vPvB (very persistent/very bioaccumulative/very toxic) substance nor does it contain a PBT or vPvB substance.*

**12. 6. Endocrine Disrupting Properties**

*This substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delgated Regulation (EU) No. 2017/2100 or Commission Regulaton (EU) 2018/605 at levels of 0.1 % or higher.*

**12. 7. Other Adverse Effects**

*Water hazard class:*

*3, hazardous*

*Behaviour in sewage systems:*

*Further ecological effects:*

*Avoid subsoil penetration. Prevent product from entering drains. Do not contaminate surface water.*

*AOX Value:*

## 13. Disposal Considerations

**13. 1. Waste Treatment Methods**

*Product:*

*In accordance with current regulations, product may be taken to a waste disposal site or incineration plant, after consultation with site operator and/or with the responsible authority.*

*European Waste Code (EWC):*

*070208 - Other still bottoms and reaction residues*

*Uncleaned packaging:*

*Non-contaminated packaging may be recycled.*
*Contaminated packaging must be disposed like the substance.*

*Waste Code No.:*

## 14. Transport Information

**14. 1. UN Number**

*ADR, IMDG, IATA* *3082*

**14. 2. UN Proper Shipping Name**

*ADR/RID:* *UMWELTGEFÄHRDENDER STOFF, FLÜSSIG, N.A.G. (1,2,2,6,6-Pentamethyl-4-Piperidyl)sebacat)*

*IMDG/IATA:* *ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (1,2,2,6,6-Pentamethyl-4-Piperidyl)sebacate)*

**14. 3. Transport Hazard Classes**

| | | |
|---|---|---|
| | *ADR Class:* | *9* |
| | *Hazard no.:* | *9* |
| | *Classification code:* | *M6* |
| | *Tunnel restriction code:* | *E* |
| | *IMDG Class (sea):* | *9* |
| | *Hazard no.:* | *9* |
| | *EmS No.:* | *F-A, S-F* |
| | *IATA Class:* | *9* |
| | *Hazard no.:* | *9* |

**14. 4. Packaging Group**

| | |
|---|---|
| *ADR/RID:* | *III* |
| *IMDG:* | *III* |
| *IATA:* | *III* |

**14. 5. Environmental Hazards**

*Labelling according 5.2.1.8 ADR/RID: fish and tree*
*Labelling according 5.2.1.6.3 IMDG: fish and tree*
*Labelled with "P" according 2.10 IMDG: yes*

**14. 6. Special Precautions for User**

*none known*

**14. 7. Maritime Transport in Bulk according to IMO Instruments**

*not evaluated*

**14. 8. Further Information**

## 15. Regulatory Information

**15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture**

*Water hazard class:*

*3, very hazardous for water (German Regulation, Assessment by list)*

*Local regulations on chemical accidents:*

*Underlies the Accident Ordinance.*

*Employment restrictions:*

*Restriction and prohibition of application:*

*EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles, Registered no. 3*

*Technical instructions on air quality:*

*5.2.5.: Organic gases*

**15. 2. Chemical Safety Assessment**

*A Chemical Safety Assessment has been carried out for this product.*

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**15. 3. Further Information**

*Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable*

## 16. Other Information

*This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.*