

Pellets Type 45 Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 9/25/2023 Revision date: 9/25/2023 Supersedes version of: 9/27/2022 Version: 4.00

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

1.1. Product identifier

Product form Trade name Other means of identification

| : | Substance | (UVCB) |
|---|-----------|--------|
|---|-----------|--------|

- : Pellets Type 45
- : Hop, Humulus lupulus

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

1.2.1. Relevant identified uses

- Use of the substance/mixture
- : Manufacturing of food

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier/Importer

Simon H. Steiner, Hopfen, GmbH Auhofstr. 18 84048 Mainburg Germany T +49 8751 8605 0 - F +49 8751 8605 80

Supplier/Importer

Steiner Hops Ltd. 15A Henley Business park Pirbright Road GU3 2DX Normandy Guildford, Surrey United Kingdom T +44 1992 572 331 Email competent person

sds@kft.de

1.4. Emergency telephone number

Emergency number

Manufacturer/Supplier

Hallertauer Hopfenveredelungsges. mbH Auhofstr. 18 84048 Mainburg Germany T +49 8751 8605 500

Manufacturer/Supplier/Importer

S. S. Steiner, Inc. 1 West Washington Avenue WA 98903 Yakima USA T +1 509 453 4731

: Simon H. Steiner, Hopfen, GmbH Tel.: +49 8751 8605 0 (Montag - Freitag 08:00 - 17:00, Central European Time)

Hallertauer Hopfenveredelungsges. mbH Tel.: +49 8751 8605 500 (Montag - Freitag 08:00 - 17:00, Central European Time)

Steiner Hops Ltd. Phone: +44 1992 572 331 (Monday to Friday 8.00-17.00, Greenwich Mean Time)

S. S. Steiner, Inc. Phone: +1 509 453 4731 (Monday to Friday 8.00-17.00, Pacific Time Zone)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

| Skin corrosion/irritation, Category 2 | H315 |
|----------------------------------------------------|------|
| Serious eye damage/eye irritation, Category 2 | H319 |
| Skin sensitisation, Category 1 | H317 |
| Full text of H- and EUH-statements: see section 16 | |

Adverse physicochemical, human health and environmental effects

May cause an allergic skin reaction. Causes skin irritation. Causes serious eye irritation.

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2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

| Hazard | pictograms | (CLP) | |
|---------|------------|-------|--|
| Tiazaiu | piciograms | | |

| hazaru piciograms (CEF) | |
|--------------------------------|------------------------------------------------------------------------------|
| | |
| | |
| | |
| | |
| | GHS07 |
| Signal word (CLP) | : Warning |
| Hazard statements (CLP) | : H315 - Causes skin irritation. |
| | H317 - May cause an allergic skin reaction. |
| | H319 - Causes serious eye irritation. |
| Precautionary statements (CLP) | : P261 - Avoid breathing dust, fume. |
| | P264 - Wash face, hands thoroughly after handling. |
| | P280 - Wear protective clothing, protective gloves, eye protection. |
| | P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. |
| | P337+P313 - If eye irritation persists: Get medical advice/attention. |
| | P362+P364 - Take off contaminated clothing and wash it before reuse. |
| | |

2.3. Other hazards

Other hazards which do not result in classification : Dust may form explosive mixture in air.

PBT: not relevant - no registration required

vPvB: not relevant – no registration required

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component | |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| hop oil (8007-04-3) | PBT: not relevant – no registration required vPvB: not relevant – no registration required |
| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3- methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (468-28- 0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

SECTION 3: Composition/information on ingredients

3.1. Substances

| Substance type | : UVCB |
|----------------|-------------------|
| Name | : Pellets Type 45 |

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3- methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (Natural component) | CAS-No.: 468-28-0 EC-No.: 207-405-3 REACH-no: 01-2120766877- 32-0001 | 2 – 14 | Acute Tox. 4 (Oral), H302 (ATE=700 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 |
| hop oil (Natural component) | CAS-No.: 8007-04-3 EC-No.: 640-023-9 | 0.4 - 5.6 | Flam. Liq. 3, H226 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 |

Full text of H- and EUH-statements: see section 16

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3.2. Mixtures

Not applicable

| SECTION 4: First aid measures 4.1. Description of first aid measures | | | |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| | | | |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. | | |
| First-aid measures after skin contact | : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. | | |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. | | |
| First-aid measures after ingestion | : Call a poison center or a doctor if you feel unwell. | | |
| 4.2. Most important symptoms and e | ffects, both acute and delayed | | |
| Symptoms/effects after skin contact | : May cause an allergic skin reaction. Irritation. | | |
| Symptoms/effects after eye contact | : Eye irritation. | | |

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 Unsuitable extinguishing media | : Use extinguishing media appropriate for surrounding fire. Water spray. Dry powder. Foam.: Strong water jet. | | |
| 5.2. Special hazards arising from the subst | tance or mixture | | |
| Fire hazard Hazardous decomposition products in case of fire | May ignite spontaneously if exposed to air.Toxic fumes may be released. Carbon monoxide. Carbon dioxide. | | |
| 5.3. Advice for firefighters | | | |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. | | |
| Other information | : Do not allow run-off from fire fighting to enter drains or water courses. Disposal must be done according to official regulations. | | |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

| 6.1.1. For non-emergency personnel | |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Emergency procedures | : Ventilate spillage area. Avoid dust formation. Avoid contact with skin and eyes. Avoid breathing dust, fume. |
| 6.1.2. For emergency responders | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |

6.2. Environmental precautions

Avoid sub-soil penetration. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

Methods for cleaning up

: Avoid dust formation. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.

Other information

: Disposal must be done according to official regulations.

6.4. Reference to other sections

Information for safe handling. See section 7. Concerning personal protective equipment to use, see section 8. For further information refer to section 13.

| SECTION 7: Handling and storage | |
|---------------------------------|--|
| | |

7.1. Precautions for safe handling

| Additional hazards when processed Precautions for safe handling | Dust could form explosive mixtures with air. Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust, fume. |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. |

7.2. Conditions for safe storage, including any incompatibilities

| Storage conditions | : Store in a well-ventilated place. Keep cool. |
|-------------------------------------------------|---------------------------------------------------------|
| Storage temperature | : < 5 °C |
| Information about storage in one common storage | : Keep away from food, drink and animal feeding stuffs. |
| facility | |

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

| Pellets Type 45 | | |
|-----------------------------------------------------------|-------------------------------------------|--|
| Germany - Occupational Exposure Limits (Generic OEL data) | | |
| | Observe general threshold limit for dust. | |

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3-methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (468-28-0) | | | | |
|---------------------------------------------------------------------------------------------------------|------------------------|--|--|--|
| DNEL/DMEL (Workers) | | | | |
| Long-term - systemic effects, dermal | 6 mg/kg bodyweight/day | | | |
| Long-term - systemic effects, inhalation | 21 mg/m ³ | | | |
| DNEL/DMEL (General population) | | | | |
| Long-term - systemic effects, inhalation | 10 mg/m ³ | | | |
| Long-term - systemic effects, dermal | 3 mg/kg bodyweight/day | | | |

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| PNEC (Water) | | |
|----------------------------------------|------------|--|
| PNEC aqua (freshwater) | 1.87 μg/L | |
| PNEC aqua (marine water) | 0.187 µg/L | |
| PNEC aqua (intermittent, freshwater) | 1.87 μg/L | |
| PNEC aqua (intermittent, marine water) | 0.187 µg/L | |
| PNEC (STP) | | |
| PNEC sewage treatment plant | 10 mg/l | |

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

In case of dust production: protective goggles. ISO 16321-1

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. EN ISO 13688

Hand protection:

In case of repeated or prolonged contact wear gloves. Chemically resistant protective gloves. Nitrile rubber. ISO 374-1. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Dust production: dust mask with filter type P2. EN 143. Breathing equipment is only to be used in order to handle the residual risk of short term jobs if all other risk minimizing measures have been carried out e.g. retention and/or local exhaust

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Always wash hands after handling the product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | : Solid |
|-----------------|-------------------|
| Colour | : Green. |
| Appearance | : Pellet. |
| Odour | : characteristic. |
| Odour threshold | : Not available |
| Melting point | : Not available |
| Freezing point | : Not applicable |

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| Boiling point | : Not available |
|-------------------------------------------------|---------------------------------------------------------------------|
| Flammability | : Not available |
| Explosive properties | : Product is not explosive. Dust may form explosive mixture in air. |
| Oxidising properties | : Non oxidizing. |
| Explosive limits | : Not applicable |
| Lower explosion limit | : Not applicable |
| Upper explosion limit | : Not applicable |
| Flash point | : Not applicable |
| Auto-ignition temperature | : Not applicable |
| Decomposition temperature | : Not available |
| pH | : Not available |
| pH solution | : Not available |
| Viscosity, kinematic | : Not applicable |
| Viscosity, dynamic | : Not applicable |
| Solubility | : Water: Slightly soluble |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Vapour pressure | : Not applicable |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : Not available |
| Relative vapour density at 20°C | : Not applicable |
| Particle size | : Not available |

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

| Relative evaporation rate (butylacetate=1) : Not app |
|------------------------------------------------------|
|------------------------------------------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

| Acute toxicity (oral) | : | Not classified (Based on available data, the classification criteria are not met) |
|-----------------------------|---|-----------------------------------------------------------------------------------|
| Acute toxicity (dermal) | : | Not classified (Based on available data, the classification criteria are not met) |
| Acute toxicity (inhalation) | : | Not classified (Based on available data, the classification criteria are not met) |

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| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3-methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (468-28-0) | | |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
| LD50 oral rat | 700 mg/kg bodyweight | |
| Skin corrosion/irritation | : Causes skin irritation. | |
| Serious eye damage/irritation | : Causes serious eye irritation. | |
| Respiratory or skin sensitisation | : May cause an allergic skin reaction. | |
| Germ cell mutagenicity | : Not classified (Based on available data, the classification criteria are not met) | |
| Carcinogenicity | : Not classified (Based on available data, the classification criteria are not met) | |
| Reproductive toxicity | : Not classified (Based on available data, the classification criteria are not met) | |
| STOT-single exposure | : Not classified (Based on available data, the classification criteria are not met) | |
| STOT-repeated exposure | : Not classified (Based on available data, the classification criteria are not met) | |
| Aspiration hazard | : Not classified (Not relevant) | |
| Pellets Type 45 | | |

| Viscosity, kinematic Not applicable | | |
|-------------------------------------|----------------------|----------------|
| | Viscosity, kinematic | Not applicable |

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

| cotoxicological data about this product are known. |
|------------------------------------------------------------------------------|
| lassified (Based on available data, the classification criteria are not met) |
| |
| lassified (Based on available data, the classification criteria are not met) |
| |
|) |

12.2. Persistence and degradability

Pellets Type 45

| · enere ·)pe ie | |
|-------------------------------------------------|-----------------------------------------------------------|
| Persistence and degradability | The product has not been tested. |
| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4- | -(3-methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (468-28-0) |
| Persistence and degradability | Readily biodegradable, failing 10-d window. |
| Biodegradation | 26 % (28 d; (OECD 301D method)) |

12.3. Bioaccumulative potential

| Pellets Type 45 | | |
|---------------------------------------------------------------------------------------------------------|--|--|
| Bioaccumulative potential The product has not been tested. | | |
| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3-methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (468-28-0) | | |
| Partition coefficient n-octanol/water (Log Pow) 4 – 5.5 (40 °C; pH 7; (OECD 117 method)) | | |

12.4. Mobility in soil

Γ

| Pellets Type 45 | |
|-----------------|----------------------------------|
| Ecology - soil | The product has not been tested. |

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| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3-methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (468-28-0) | |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Organic Carbon Normalized Adsorption Coefficient (Log Koc) | 2.7 – 2.9 (Quantitative structure-activity relationship (QSAR)) |

12.5. Results of PBT and vPvB assessment

| Pellets Type 45 | |
|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PBT: not relevant – no registration required | |
| vPvB: not relevant – no registration required | |
| Component | |
| hop oil (8007-04-3) | PBT: not relevant – no registration required vPvB: not relevant – no registration required |
| 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3- methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one (468-28- 0) | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII |

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

Other adverse effects

: No additional information available.

| opean waste catalogue. Do not with domestic waste. |
|----------------------------------------------------|
| ostances known to cause |
| |
| |

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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| ADR | IMDG | ΙΑΤΑ | ADN | RID |
|--------------------------|---------------|---------------|---------------|---------------|
| 14.1. UN number or ID n | umber | I | I | l |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.2. UN proper shippin | g name | | 1 | I |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.3. Transport hazard o | class(es) | | 1 | I |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.4. Packing group | | | 1 | 1 |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |
| 14.5. Environmental haz | ards | | | |
| Not regulated | Not regulated | Not regulated | Not regulated | Not regulated |

14.6. Special precautions for user

Overland transport Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport Not regulated

Not regulated

Rail transport Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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

15.1.1. EU-Regulations

Other information, restriction and prohibition : Take note of Directive 94/33/EC on the protection of young people at work. regulations

REACH Annex XVII (Restriction List)

| EU restriction list (REACH Annex XVII) | |
|----------------------------------------|--------------------------------------------------------------------------------------------------------|
| Reference code | Applicable on |
| 3(a) | hop oil |
| 3(b) | hop oil ; 3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3-methyl-1-oxobutyl)cyclohexa-2,4-dien-1-one |
| 3(c) | hop oil |
| 40. | hop oil |

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

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REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

| Germany | |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Employment restrictions | : Employment prohibitions or restrictions on the protection of young people at work according to § 22 JArbSchG in the case of formation of hazardous substances have to be observed. |
| National Rules and Recommendations | : TRGS 400: Risk Assessment for Activities involving Hazardous Substances. |
| | TRGS 401: Risks resulting from skin contact - identification, assessment, measures. |
| | TRGS 510: Storage of hazardous substances in non-stationary containers. |
| | TRGS 520: Construction and operation of collection points and temporary storage for small |
| | amounts of hazardous waste. |
| | TRGS 900: Occupational Exposure Limits. |
| Water hazard class (WGK) | : WGK 2, Significantly hazardous to water. |
| Storage class (LGK, TRGS 510) | : LGK 11 - Combustible solids. |
| Hazardous Incident Ordinance (12. BImSchV) | : Is not subject of the Hazardous Incident Ordinance (12. BImSchV) |

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

| Indication of changes | | | |
|-----------------------|------------------------------------|----------|-------------------------------------------------------------------------------------------------------------------|
| Section | Changed item | Change | Comments |
| | General revision | | |
| 2.3 | ED text | Removed | |
| 2.3 | Results of PBT and vPvB assessment | Modified | |
| 3.1 | Classification | Modified | Constituent: hop oil |
| 8.1 | DNEL and PNEC | Modified | Constituent: 3,5-dihydroxy-2,6,6-tris(3- methylbuten-2-yl)-4-(3-methyl-1- oxobutyl)cyclohexa-2,4-dien-1-one |

| Abbreviations and acronyms: | |
|-----------------------------|-------------------------------------------------------------------------------------------------|
| ATE | Acute Toxicity Estimate |
| LD50 | Median lethal dose |
| 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 |
| BCF | Bioconcentration factor |

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| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
|---------|---------------------------------------------------------------------------------------------------|
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC50 | Median effective concentration |
| IARC | International Agency for Research on Cancer |
| ΙΑΤΑ | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LOAEL | Lowest Observed Adverse Effect Level |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| РВТ | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| TLM | Median Tolerance Limit |
| vPvB | Very Persistent and Very Bioaccumulative |
| CAS-No. | Chemical Abstract Service number |
| | |

Data sources

: Information provided by the manufacturer. European Chemicals Agency,

| Department issuing data specification sheet: | http://echa.europa.eu/. : KFT Chemieservice GmbH Im Leuschnerpark 3 D-64347 Griesheim |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contact person Other information | Phone: +49 6155-8981-400 Fax: +49 6155 8981-500 SDS Service: +49 6155 8981-522 Dr. Stefanie Finsterbusch-Kettner This safety data sheet is for informational purposes only and does not fully comply with national legal requirements. The national distributor is responsible for a legally compliant safety data sheet. A safety data sheet is not required for this product. This Product Safety Information Sheet has been created on a voluntary basis. Version/s 1.00-3.00 is/are not available in this language. |

| Full text of H- and EUH-statements: | |
|-------------------------------------|-------------------------------------------------------------------|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment – Chronic Hazard, Category 3 |
| Asp. Tox. 1 | Aspiration hazard, Category 1 |
| Eye Irrit. 2 | Serious eye damage/eye irritation, Category 2 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |

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| H226 | Flammable liquid and vapour. |
|---------------|----------------------------------------------------|
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H412 | Harmful to aquatic life with long lasting effects. |
| Skin Irrit. 2 | Skin corrosion/irritation, Category 2 |
| Skin Sens. 1 | Skin sensitisation, Category 1 |

KFT SDS EU 00

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.