

Date of issue: 09/01/2017 Revision date: 09/01/2017 Version: 1.00

1.1. Identification	
Trade name	: Lupulin Powder (Type 35)
I.2. Recommended use and restriction Use of the substance/mixture	Son use Manufacturing of food
I.3. Supplier	
Manufacturer/Supplier/Importer S. S. Steiner, Inc. 655 Madison Avenue New York, NY 10065 - USA T +1 212 838 8900	Email competent person sds@kft.de
Manufacturer/Supplier/Importer Simon H. Steiner, Hopfen, GmbH Auhofstr. 18 Mainburg, 84048 - Germany T +49-(0)8751-8605-0 - F +49-(0)8751-8605	Supplier/Importer Steiner Hops Ltd. 185-189 High St Epping, Essex CM16 4BL - United Kingdom 5-80
1.4. Emergency telephone number	
Emergency number	: S. S. Steiner, Inc. Phone: +1 212 838 8900 (Monday – Friday 08.00 – 17.00, Eastern Time Zone)
	Simon H. Steiner, Hopfen, GmbH Tel.: +49-8751-8605-0 (Monday – Friday 08:00 – 17:00, Central European Time)
	Steiner Hops Ltd.
	Phone: +44 1992 572 331 (Monday – Friday 08.00 – 17.00, Greenwich Mean Time) on
2.1. Classification of the substance of GHS-US classification Acute toxicity (oral) H302	Phone: +44 1992 572 331 (Monday – Friday 08.00 – 17.00, Greenwich Mean Time) on
2.1. Classification of the substance of GHS-US classification	Phone: +44 1992 572 331 (Monday – Friday 08.00 – 17.00, Greenwich Mean Time) on or mixture
Classification of the substance of GHS-US classification Acute toxicity (oral) H302 Category 4 Combustible Dust	Phone: +44 1992 572 331 (Monday – Friday 08.00 – 17.00, Greenwich Mean Time) on br mixture Harmful if swallowed
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GHS-US classification Acute toxicity (oral) H302 Category 4	Phone: +44 1992 572 331 (Monday – Friday 08.00 – 17.00, Greenwich Mean Time) on or mixture Harmful if swallowed May form combustible dust concentrations in air
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Substances 3.1.

Not applicable

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according to US OSHA Hazard Communication Standard (HCS 2012); 29 CFR Part 1910.1200

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
3,5-dihydroxy-2,6,6-tris(3-methylbuten-2-yl)-4-(3-methyl-1- oxobutyl)cyclohexa-2,4-dien-1-one	(CAS-No.) 468-28-0	5-20	Acute Tox. 3 (Oral), H301
hop oil	(CAS-No.) 8007-04-3	2-<10	Flam. Liq. 3, H226 Asp. Tox. 1, H304

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures	
 4.1. Description of first aid measure First-aid measures general First-aid measures after inhalation First-aid measures after skin contact First-aid measures after eye contact First-aid measures after ingestion 4.2. Most important symptoms and examples after symptoms after symptoms after symptoms and examples after symptoms and examples after symptoms after sy	 Call a poison center/doctor/physician if you feel unwell. Remove person to fresh air and keep comfortable for breathing. Wash skin with plenty of water. Rinse eyes with water as a precaution. Rinse mouth. Call a poison center/doctor/physician if you feel unwell.
Treat symptomatically.	d special treatment, if necessary
5.1. Suitable (and unsuitable) exting	
Suitable extinguishing media Unsuitable extinguishing media	 Making extinguishing agents environment-friendly. Water spray. Dry powder. Foam. Strong water jet.
5.2. Specific hazards arising from the Fire hazard Reactivity	 he chemical May ignite spontaneously if exposed to air. The product is non-reactive under normal conditions of use, storage and transport.
5.3. Special protective equipment ar	nd precautions for fire-fighters
Firefighting instructions Protection during firefighting	 Cool closed containers exposed to fire with water spray. 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 m	leasures
6.1. Personal precautions, protective	e equipment and emergency procedures
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Avoid dust formation.
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.
6.3. Methods and material for contai	inment and cleaning up

Methods for cleaning up : Avoid dust formation. Take up mechanically (sweeping, shoveling) 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.

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SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Additional hazards when processed	: Dust could form explosive mixtures with air.	
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.	
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.	
7.2. Conditions for safe storage, including	ng any incompatibilities	
Storage conditions	: Keep container tightly closed. Keep away from heat and direct sunlight. Store in a well- ventilated place. Keep cool.	
Maximum storage period	: ≈ 5 year(s)	
Storage temperature	: <41 °F	
Information about storage in one common storage facility	: Keep away from food, drink and animal feeding stuffs.	

SECTION 8	Exposure	controls/	personal	protection
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8.1. Control parameters

No additional information available.

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

In case of repeated or prolonged contact wear gloves. 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

Eye protection:

Not required for normal conditions of use. In case of dust production: protective goggles.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Accidental release measures. Filter type: P1.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and che	emical properties
Physical state	: Solid
Appearance	: Powder.
Color	: Yellow Green
Odor	: characteristic
Odor threshold	: No data available
рН	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not self-igniting
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available

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according to US OSHA Hazard Communication Standard (HCS 2012); 29 CFR Part 1910.1200

Relative density	: No data available
Solubility	: Water: Slightly soluble
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosion limits	: No data available
Explosive properties	: Product is not explosive. Dust may form explosive mixture in air.
Oxidizing properties	: No data available
9.2. Other information	
Other properties	: Combustible.

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. To avoid thermal decomposition, do not overheat.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Potential dust explosion hazard from airborne release.

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 toxicological effects

Acute toxicity

: Oral: Harmful if swallowed.

Lupulin Powder (Type 35)		
ATE US (oral)	491 mg/kg body weight	
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	100 mg/kg body weight	
Skin corrosion/irritation	: Not classified	
	(Based on available data, the classification criteria are not met)	
Serious eye damage/irritation	: Not classified	
	(Based on available data, the classification criteria are not met)	
Respiratory or skin sensitization	: Not classified	
	(Based on available data, the classification criteria are not met)	
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)	
Specific target organ toxicity – single exposure	: Not classified	
	(Based on available data, the classification criteria are not met)	

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Specific target organ toxicity – repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Not relevant)

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general	: No ecotoxicological data about this product are known.	
12.2. Persistence and degradability		
No additional information available		
12.3. Bioaccumulative potential		
No additional information available		
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		
Other adverse effects	: No additional information available.	
Effect on the global warming	: No known effects from this product.	
GWPmix comment	: No known effects from this product.	

SECTION 13: Disposal considerations		
13.1. Disposal methods		
Waste treatment methods	: Disposal must be done according to official regulations. Do not dispose of with domestic waste. Do not discharge into drains or the environment.	
SECTION 14: Transport information		

Department of Transportation (DOT)

In accordance with DOT

Not applicable

TDG

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

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Lupulin Powder (Type 35)
Manufacturing of food

15.2. International regulations

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) All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

SECTION 16: Other information		
Revision date	: 09/01/2017	
Data sources	: Information provided by the manufacturer.	
Department issuing data specification sheet:	: KFT Chemieservice GmbH Im Leuschnerpark. 3 64347 Griesheim Postfach 1451 64345 Griesheim Germany	
	Phone: +49 6155-8981-400 Fax: +49 6155 8981-500 Safety Data Sheet Service: +49 6155 8981-522	
Contact person	: Stefanie Zgorzelski	
Full text of H-phrases:		

H226	Flammable liquid and vapor
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways

Abbreviations and acronyms:

ATE	Acute Toxicity Estimate	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LD50	Median lethal dose	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
SDS	Safety Data Sheet	

KFT SDS US 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