Safety Data Sheet (SDS) - Xanthohumol 5% (Humulus lupulus extract)

According to Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EU) 2020/878
Version 1.0, 25-Oct-2026

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

Product name:	Xanthohumol 5% (Humulus lupulus extract)
Recommended uses:	Professional botanical ingredient for formulation, manufacturing, analytical and R&D use
Uses advised against:	Consumer handling of the neat powder; medicinal or other use not supported by the product specification
Catalogue Number:	NST-10-189
Supplier:	NATURE SCIENCE TECHNOLOGIES Ltd. Briezu 11, Lapsas, Latvia, LV-2107; Phone: +371 24220280 Email: inquiries@nstchemicals.com; Website: www.nstchemicals.com Emergency: Latvian Poison Information Centre +371 67042473 (24/7)

Section 2. Hazards identification

Classification: Regulation (EC) No 1272/2008 (CLP): Skin Sensitisation, Category 1.
H317: May cause an allergic skin reaction.

Label elements:



Pictogram: GHS07 | Signal word: Warning
Hazard statement: H317 May cause an allergic skin reaction.
Precautionary statements: P261 Avoid breathing dust. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves. P302+P352 IF ON SKIN: Wash with plenty of water. P333+P317 If skin irritation or rash occurs: Get medical help. P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/container in accordance with applicable regulations.
Other hazards: Fine airborne organic dust may cause mechanical irritation and may form a combustible dust atmosphere. PBT, vPvB, PMT/vPvM and endocrine-disrupting properties have not been established.

Section 3. Composition/information on ingredients

Chemical name:	Xanthohumol, not less than 5.0% by HPLC; balance Humulus lupulus flower-extract matrix and/or carrier not further specified in the quality specification.
Synonyms:	Xanthohumol 5%; hop flower extract standardised to xanthohumol
Chemical formula:	C21H22O5 (xanthohumol marker compound)
Molecular weight:	354.40 g/mol (xanthohumol marker compound)
CAS No:	6754-58-1 (xanthohumol marker compound)
EC No.	614-078-4 (xanthohumol marker compound)

Section 4. First aid measures

Inhalation:	Move to fresh air and keep at rest. Obtain medical advice if symptoms occur or persist.
Skin:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Obtain medical advice if irritation or rash occurs or persists.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing; obtain medical advice if irritation persists.
Ingestion:	Rinse mouth. Do not induce vomiting unless directed by medical personnel. Contact a poison centre or doctor if unwell. Treat symptomatically.

Section 5. Firefighting measures

Extinguishing media suitable:	Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide. Avoid a direct high-pressure water jet.
Special protection of fire-fighters:	Wear self-contained breathing apparatus and full protective equipment. Carbon monoxide, carbon dioxide and irritating fumes may form during combustion or thermal decomposition. Prevent airborne dust accumulation.

Section 6. Accidental release measures

Personal precautions:	Avoid breathing dust and contact with skin or eyes. Ensure adequate ventilation. Wear the personal protective equipment described in Section 8.
Environmental precautions:	Prevent entry into drains, surface water and soil. Avoid uncontrolled release to the environment.
Methods for cleaning up:	Collect mechanically or with a HEPA-filtered vacuum without generating dust. Place in a closed, labelled container for disposal. Wash the affected area after collection.

Section 7. Handling and storage

Handling:	Handle in a well-ventilated area. Avoid dust formation, inhalation and contact with skin, eyes and clothing. Keep away from ignition sources and strong oxidising agents.
Storage:	Store tightly closed in a cool, dry, well-ventilated place. Protect from strong light and heat. Supplier specification shelf life: 24 months under recommended conditions.

Section 8. Exposure controls/personal protection

Engineering measures:	No substance-specific occupational exposure limit has been established. Use closed handling or local exhaust ventilation where dust may form. Provide eyewash facilities.
Hygiene measures:	Wash hands and exposed skin after handling and before breaks. Do not eat, drink or smoke in work areas. Remove and wash contaminated clothing before reuse.
Personal protective equipment:	Respiratory protection: particulate-filter respirator suitable for the assessed dust exposure when ventilation is insufficient. Hands: chemical-resistant protective gloves, e.g. nitrile.
Skin and body:	Protective work clothing appropriate to the scale and duration of exposure.
Eyes:	Safety glasses with side shields; use chemical goggles where dust exposure is significant.

Section 9. Physical and chemical properties

Physical state:	Solid, fine botanical-extract powder
Colour:	Brown
Odour:	Characteristic
Molecular Weight:	354.40 g/mol (xanthohumol marker compound)
Melting point:	Not determined for the supplied mixture
Flash point:	No data available
Boiling point:	No reliable product-specific data identified
Solubility:	No reliable product-specific data identified
Explosive properties:	Not classified as explosive or flammable. Further data for boiling point, flash point, vapour pressure, density, partition coefficient and particle characteristics are not available for the mixture.

Section 10. Stability and reactivity

Stability:	Stable under recommended storage and normal handling conditions. No hazardous reactions are expected under normal use.
Materials to avoid:	Strong oxidising agents; excessive heat, strong light and conditions that generate or ignite airborne dust.
Hazardous decomposition products:	Carbon monoxide, carbon dioxide and irritating fumes may form during combustion or thermal decomposition.

Section 11. Toxicological information

Acute toxicity:	Not classified for acute toxicity based on available mixture information. Quantitative product-specific endpoint data were not identified.
Skin corrosion/irritation:	Not classified for skin corrosion/irritation or serious eye damage/irritation on available information. Dust may cause mechanical irritation.
Respiratory or skin sensitisation:	May cause an allergic skin reaction (Skin Sens. 1, H317), based on the concentration of the classified xanthohumol component.
CMR effects:	Available information does not support classification for germ-cell mutagenicity, carcinogenicity or reproductive toxicity; complete studies were not identified.
Signs and symptoms of exposure:	Dust may cause coughing or mechanical discomfort. Irritation or an allergic skin response may occur where indicated by the classification.
Potential health effects:	No classification is assigned for specific target-organ toxicity or aspiration hazard on available information.
Inhalation:	Dust may cause temporary respiratory discomfort; move the exposed person to fresh air.
Skin:	Wash after contact. Sensitised persons may develop an allergic skin reaction to the xanthohumol-containing product.
Eyes:	Dust or direct contact may cause irritation; rinse promptly and thoroughly with water.
Ingestion:	May cause gastrointestinal discomfort. Rinse mouth and contact a poison centre or doctor if unwell.
Other information:	Treat symptomatically. Seek prompt medical advice after significant exposure or if symptoms persist.

Section 12. Ecological information

Ecotoxicity:	Pure xanthohumol is notified as very toxic to aquatic life (H400). At the specified 5% and without a source-supported M-factor, the supplied mixture does not meet the available CLP threshold for Aquatic Acute 1. Avoid environmental release.

Persistence and degradability:	No reliable mixture-specific data were identified for degradability, bioaccumulation or mobility in soil.
Other adverse effects:	The product is not identified as PBT or vPvB on available information. PMT/vPvM and endocrine-disrupting properties have not been established.

Section 13. Disposal considerations

Product:	Dispose of contents through a licensed waste disposal contractor in accordance with local, regional and national requirements. Do not discharge to drains.
Contaminated packaging:	Empty completely. Dispose of contaminated packaging in accordance with applicable requirements; do not reuse unless appropriately decontaminated.

Section 14. Transport information

ADR/RID:	Not regulated as dangerous goods
IMDG:	Not regulated as dangerous goods
IATA:	Not regulated as dangerous goods

Section 15. Regulatory information

EU regulatory information:	Prepared in accordance with Regulation (EC) No 1907/2006 (REACH), Annex II, as amended by Regulation (EU) 2020/878. Classification and labelling are stated under Regulation (EC) No 1272/2008 (CLP), as amended. A chemical safety assessment has not been carried out by the supplier for this product.

Section 16. Other information

Notice to reader:	Version 1.0; issue date 25-Oct-2026. Classification uses the NST mixture composition, ECHA C&L information for xanthohumol and CLP mixture concentration rules. H317: May cause an allergic skin reaction. The formula and molecular mass apply to the xanthohumol marker compound, not the complete botanical mixture. This information is guidance and not a warranty of product properties.