Safety Data Sheet (SDS) - Kaempferol

According to Regulation (EC) No 1907/2006 (REACH), as amended by Regulation (EU) 2020/878
Version 1.2, 23-Nov-2026

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

Product name: Kaempferol >=98.0%; botanical source: Styphnolobium japonicum (L.) Schott fruit
Recommended uses: Ingredient for professional formulation, analytical and R&D use
Uses advised against: Uses not permitted by applicable legislation; household or non-professional use
Catalogue Number: NST-10-24
Supplier: NATURE SCIENCE TECHNOLOGIES Ltd
Briezu 11, Lapsas, Latvia, LV-2107
Phone: +371 24220280
Email: sales@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 Irrit. 2 (H315); Eye Irrit. 2 (H319); STOT SE 3 (H335); Muta. 2 (H341).



Hazard pictograms: GHS07, GHS08. Signal word: Warning. Hazard statements: H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H341 Suspected of causing genetic defects.
Precautionary statements: P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust. P264 Wash thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/protective clothing/eye protection. P302+P352 IF ON SKIN: Wash with plenty of water. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313 IF exposed or concerned: Get medical advice/attention. P405 Store locked up. P501 Dispose of contents/container in accordance with applicable regulations.
Other hazards: Fine airborne organic dust may form a combustible dust atmosphere. The substance is not identified as PBT or vPvB and is not identified as an endocrine disruptor.

Section 3. Composition/information on ingredients

Chemical name: Kaempferol, >=98.0% (HPLC assay specification); botanical source: Styphnolobium japonicum (L.) Schott, fruit.
Synonyms: 3,4',5,7-Tetrahydroxyflavone; Kempferol; Robigenin
Chemical formula: C15H10O6
Molecular weight: 286.23 g/mol
CAS No: 520-18-3
EC No. 208-287-6

Section 4. First aid measures

Inhalation: Remove to fresh air and keep comfortable for breathing. Call a poison centre or doctor if respiratory symptoms occur. Obtain medical advice after significant exposure.
Skin: Remove contaminated clothing. Wash skin thoroughly with soap and plenty of water. If skin irritation occurs, obtain medical advice/attention.
Eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, obtain medical advice/attention.
Ingestion: Rinse mouth. Do not induce vomiting. Obtain medical advice if unwell or if a significant amount has been swallowed. Never give anything by mouth to an unconscious person.

Section 5. Firefighting measures

Extinguishing media suitable: Water spray, alcohol-resistant foam, dry extinguishing powder or carbon dioxide. Use extinguishing measures appropriate to the surrounding fire.
Special protection of fire-fighters: Wear self-contained breathing apparatus and full protective equipment. Thermal decomposition may produce carbon monoxide, carbon dioxide and irritating fumes.

Section 6. Accidental release measures

Personal precautions: Restrict access. Avoid dust formation and breathing dust. Prevent contact with skin and eyes. Ensure adequate ventilation and wear protective gloves, clothing and eye protection.

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 and clean the affected area.

Section 7. Handling and storage

Handling:	Handle only after reading all safety precautions. Use in a well-ventilated area. Minimise dust formation. Avoid breathing dust and contact with skin and eyes. Wear protective gloves, clothing and eye protection. Wash thoroughly after handling.
Storage:	Store in a cool and dry place. Keep container tightly closed, store locked up and protect from strong light and heat. Keep away from strong oxidising agents.

Section 8. Exposure controls/personal protection

Engineering measures:	No substance-specific occupational exposure limit has been established. Apply applicable limits for nuisance dust. Use local exhaust ventilation and 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 contaminated clothing before reuse.
Personal protective equipment:	Respiratory protection: suitable particulate-filter respirator where dust forms or ventilation is insufficient. Hands: chemical-resistant gloves appropriate to the work conditions, e.g. nitrile.
Skin and body:	Protective work clothing appropriate to the scale and duration of exposure. Wash contaminated clothing before reuse.
Eyes:	Safety glasses with side shields; use tightly fitting chemical goggles where dust exposure is significant.

Section 9. Physical and chemical properties

Physical state:	Solid, fine powder
Colour:	Light yellow
Odour:	Characteristic
Molecular Weight:	286.23 g/mol
Melting point:	Approximately 276-278 deg C; decomposition may occur
pH:	No data available
Boiling point:	No reliable data available; decomposition may occur before boiling
Solubility:	Slightly soluble in water; soluble in ethanol and ether
Explosive properties:	Not classified as explosive. Fine airborne organic dust may form a combustible dust atmosphere.

Section 10. Stability and reactivity

Stability:	Stable under recommended storage and normal handling conditions. Protect from strong light, air and heat.
Materials to avoid:	Strong oxidising agents, excessive heat, strong light and conditions that generate 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:	Based on available data, the classification criteria for acute toxicity are not met. Reliable product-specific quantitative toxicity data are limited.
Skin corrosion/irritation:	Causes skin irritation (H315) and serious eye irritation (H319).
Respiratory or skin sensitisation:	Based on available data, the classification criteria for respiratory or skin sensitisation are not met.
CMR effects:	Suspected of causing genetic defects (Muta. 2, H341). Based on available data, the classification criteria for carcinogenicity and reproductive toxicity are not met.
Signs and symptoms of exposure:	Dust may cause respiratory irritation. Skin contact may cause redness or discomfort. Eye contact may cause redness, tearing and pain. Genetic effects are suspected.
Potential health effects:	The principal expected effects are skin, eye and respiratory irritation. Seek medical advice if exposed or concerned regarding possible mutagenic effects.
Inhalation:	May cause respiratory irritation, coughing, sore throat or breathing discomfort.
Skin:	Causes skin irritation; prolonged contact may increase redness or discomfort.
Eyes:	Causes serious eye irritation, including redness, tearing and pain.
Ingestion:	May cause gastrointestinal discomfort if swallowed. Rinse mouth and obtain medical advice if unwell.
Other information:	If exposed or concerned, obtain medical advice/attention. Treat symptomatically.

Section 12. Ecological information

Ecotoxicity:	No adequate product-specific aquatic toxicity data are available. The product is not classified as hazardous to the aquatic environment. Avoid uncontrolled release.

Persistence and degradability:	Persistence, degradability, bioaccumulation and mobility data are limited. The substance is not identified as PBT or vPvB.
Other adverse effects:	The substance is not identified as an endocrine disruptor. No other adverse environmental effects are known.

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. Handle contaminated packaging in the same way as the product. Recycle clean packaging where permitted.

Section 14. Transport information

ADR/RID:	Not regulated as dangerous goods
IMDG:	Not regulated as dangerous goods. Marine pollutant: No.
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 have been assessed 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 1.2; revision date 23-Nov-2026. Revised to retain only general grade specifications. Approved GHS pictogram artwork was applied with corrected aspect ratio and spacing. Chemical classification and transport wording were not changed. Conservative classification: Skin Irrit. 2 (H315), Eye Irrit. 2 (H319), STOT SE 3 (H335) and Muta. 2 (H341), based on current European REACH safety information for kaempferol, CAS 520-18-3. ADR/RID, IMDG and IATA transport: not regulated. The information is based on the product specification and safety information available at the date of issue. It is provided in good faith as guidance for safe handling, storage, transport and disposal and is not a warranty of product properties. Users are responsible for assessing suitability and complying with applicable requirements.