

Safety Data Sheet

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

1.1 Product identifiers

Product name: 3-Cyano-7-hydroxycoumarin *CAS 19088-73-4*

Product number: 40

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

Identified uses: For research use only. Not intended for diagnostic or therapeutic use.

1.3 Details of the supplier of the safety data sheet

Company: AAT Bioquest, Inc.

Address: 5775 W Las Positas Blvd, Pleasanton, CA 94588

Telephone: (408)-733-1055

Fax: (408)-733-1304

Email: info@aatbio.com

1.4 Emergency telephone number

Chemtrec (Within USA): 1-(800)-424-9300

Chemtrec (Outside USA): 1-(703)-527-3887

Section 2: Hazard identifications

2.1 Classification of the substance or mixture

Skin corrosion/irritation: Category 2

Serious eye damage/eye irritation: Category 2A

Specific target organ toxicity, single exposure; Respiratory tract irritation: Category 3

Acute toxicity, oral; acute toxicity, dermal; acute toxicity, inhalation: Category 4

2.2 Label elements

Signal word: Warning

Hazard statements: H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled

Symbols/Pictograms:



Precautionary statements - prevention:	Wash hands... thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Wash hands... thoroughly after handling. Do not touch eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.
Precautionary statements - response:	IF ON SKIN: wash with plenty of water. Specific treatment (see on this label). If skin irritation occurs: Get medical help. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. If eye irritation persists: Get medical help. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell.
Precautionary statements - storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Precautionary statements - disposal:	Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Hazards not otherwise classified (HNOC):	Hazards not otherwise classified (HNOC) or not covered by GHS - none
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2.4 Other information

Other hazards:	Not available
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Section 3: Composition/information on ingredients

3.1 Substances

Chemical name:	3-Cyano-7-hydroxycoumarin *CAS 19088-73-4*
CAS number:	19088-73-4
Molecular weight:	187.15
Formula:	Not available

Section 4: First aid measures

4.1 First-aid measures

General advice:	Show this material safety data sheet to the doctor in attendance.
Eye contact:	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
Skin contact:	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
Inhalation:	After inhalation: fresh air.
Ingestion:	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Self-protection of the first aider:	Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms:	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
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4.3 Indication of any immediate medical attention and special treatment needed

Note to physicians:	Indication of any immediate medical attention and special treatment needed: No data available
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Section 5: Firefighting measures

5.1 Suitable extinguishing media

Suitable extinguishing media:	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media:	For this substance/mixture no limitations of extinguishing agents are given.

5.2 Specific hazards arising from the chemical

Specific hazards arising from the chemical:	Carbon oxides Nitrogen oxides (NOx) Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.
Hazardous combustion products:	Carbon oxides Nitrogen oxides (NOx)

5.3 Explosion data

Sensitivity to mechanical impact:	No information available.
Sensitivity to static discharge:	No information available.

5.4 Protective equipment and precautions for firefighters

Protective equipment and precautions for firefighters:	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Further information: Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
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Section 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures

Personal precautions:	Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
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6.2 Environmental precautions

Environmental precautions:	Do not let product enter drains.
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6.3 Methods and material for containment and cleaning up

Methods for containment:	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10).
Methods for cleaning up:	Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts. Reference to other sections: For disposal see section 13.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:

Work under hood. Do not inhale substance/mixture. Hygiene measures: Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:

Tightly closed. Dry. Light sensitive. Storage class: Storage class (TRGS 510): 11: Combustible Solids. Specific end use(s): Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Incompatible materials:

No information available.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Exposure guidelines:

Contains no substances with occupational exposure limit values.

8.2 Appropriate engineering controls

Engineering controls:

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

8.3 Individual protection measures, such as personal protective equipment

Eye/face protection:

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Safety glasses

Skin and body protection:

Handle with impervious gloves. This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact: Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min, Material tested: KCL 741 Dermatrill® L. Splash contact: Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min, Material tested: KCL 741 Dermatrill® L. Body Protection: protective clothing

Respiratory protection:

Recommended Filter type: Filter type P2. The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

General hygiene considerations:

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Section 9: Physical and chemical properties

Physical state:

Solid

Solubility in water:

Low

Appearance:

No information available.

Odor/odor threshold:	No data available
pH:	No data available
Melting point/freezing point:	Melting point/ range: ≥ 250 °C (≥ 482 °F) - lit.
Boiling point:	No data available
Flashpoint:	No data available
Liquid density:	No data available
Evaporation rate:	No data available
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Specific gravity:	No data available
Water solubility:	No data available
Solubility in other solvents:	No information available.
Partition coefficient:	No data available
Autoignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

Section 10: Stability and reactivity

Reactivity:	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Chemical stability:	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions:	No data available
Hazardous polymerization:	No information available.
Conditions to avoid:	no information available
Incompatible materials:	Oxidizing agents
Hazardous decomposition products:	In the event of fire: see section 5

Section 11: Toxicological information

11.1 Information on likely routes of exposure

Inhalation:	LC50 Inhalation - 4 h - 1.5 mg/l - dust/mist (Acute toxicity estimate)
Eye contact:	Serious eye damage/eye irritation: Remarks: No data available
Skin contact:	Skin corrosion/irritation: Remarks: No data available
Ingestion:	Oral: No data available; LD50 Oral - 500.1 mg/kg

11.2 Information on toxicological effects

Symptoms:	No information available.
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11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity:

Specific target organ toxicity - repeated exposure: No data available

11.4 Numerical measures of toxicity - product information

Unknown acute toxicity:

Acute toxicity: Oral: No data available; LD50 Oral - 500.1 mg/kg; LC50 Inhalation - 4 h - 1.5 mg/l - dust/mist (Acute toxicity estimate); LD50 Dermal - 1,100 mg/kg; No data available. Respiratory or skin sensitization: No data available. Germ cell mutagenicity: No data available. Carcinogenicity - IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. Reproductive toxicity: No data available. Specific target organ toxicity - single exposure: Inhalation - May cause respiratory irritation. Aspiration hazard: No data available. Additional Information: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological information

Ecotoxicity:

Toxicity: No data available

Persistence and degradability:

No data available

Bioaccumulation:

Bioaccumulative potential: No data available

Mobility:

Mobility in soil: No data available

Section 13: Disposal consideration

Disposal of wastes:

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging:

Do not reuse container.

Other information:

None

Section 14: Transport information

DOT:

DOT (US): Not dangerous goods

IMDG:

Not dangerous goods

IATA:

Not dangerous goods

Section 15: Regulatory information

15.1 International Inventories

US Toxic Substances Control Act (TSCA):

Product contains substance(s) not listed on TSCA inventory. TSCA list: No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.

Canada (DSL/NDL):

Not listed

Europe (EINECS/ELINCS/NLP):

Not listed

Australia (AICS):

Not listed

South Korea (KECL):

Not listed

China (IECSC):	Not listed
Japan (ENCS):	Not listed
Phillipines (PICCS):	Not listed

15.2 US Federal Regulations

SARA 313:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SARA 311/312 components:	Acute Health Hazard
CWA (Clean Water Act):	No information available.

15.3 US State Regulations

California Proposition 65:	Not listed
Massachusetts-RTK:	No components are subject to the Massachusetts Right to Know Act.
New Jersey-RTK:	Not listed
Pennsylvania-RTK:	Not listed
U.S. State Right-To-Know Regulations:	CERCLA Reportable Quantity: This material does not contain any components with a CERCLA RQ. SARA 304 Extremely Hazardous Substances Reportable Quantity: This material does not contain any components with a section 304 EHS RQ. SARA 302 Extremely Hazardous Substances Threshold Planning Quantity: This material does not contain any components with a section 302 EHS TPQ. Maine Chemicals of High Concern: Product does not contain any listed chemicals. Vermont Chemicals of High Concern: Product does not contain any listed chemicals. Washington Chemicals of High Concern: Product does not contain any listed chemicals.

Section 16: Other information

16.1 HMIS

Health hazards:	Not determined
Flammability:	Not determined
Reactivity:	Not determined
Personal protection:	Not determined

16.2 NFPA

Health hazards:	Not determined
Flammability:	Not determined
Stability:	Not determined
Physical and chemical properties:	Not determined

16.3 Further information

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Users should make independent decisions regarding the completeness of the information based on all sources available. AAT Bioquest shall not be held liable for any damage resulting from handling or from contact with the above product.