



## Safety Data Sheet

Material Name: Vitamin K1-[2H7]  
Revision date: 2022-08-24

Compliant with GB/T 16483 and  
GB/T 17519  
SDS ID: 1922 (CHINA)-I  
Version 1.0

### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

#### Product identifier

##### Material Name

Vitamin K1-[2H7]

##### Product Code

Product Code 5072-ISO

#### Details of the supplier of the safety data sheet

当地信息 (Local information) :

艾微美科材国际贸易(上海)有限公司  
ATMI International Trading Co,LTD

上海市科苑路88号德国中心二号楼523-533室  
Unit 523-533, Tower 2, German Center, No.88 Keyuan Road, Shanghai 201203, China

邮政编码 : 201203  
Zip Code: 201203

电话 : 86-21-80236500  
Telephone: 86-21-80236500

应急电话 :  
Emergency Call:

86-532-83889090 (中国24小时化学事故应急咨询服务热线)  
4001-204937 (ChemTrec 中国)  
1-703-527-3887 (ChemTrec 国际)  
86-21-80236500 (上海)  
E-mail: Product.stewardship@entegris.com

#### Product Use

General industrial, research and development

#### Restrictions on Use

R&D Use Only.

### Section 2 - HAZARDS IDENTIFICATION

#### Emergency Overview

yellow oil

#### GHS hazard classification (according to GB 30000.2-GB 30000.29)

None needed according to classification criteria.

#### Label elements

##### Symbol(s)

None needed according to classification criteria.

##### Signal word

None needed according to classification criteria

**Material Name: Vitamin K1-[2H7]**  
**Revision date: 2022-08-24**

**Hazard Statement(s)**

None needed according to classification criteria.

**Precautionary statements****Prevention**

None needed according to classification criteria.

**Response**

None needed according to classification criteria.

**Storage**

None needed according to classification criteria.

**Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Physical and Chemical Hazards**

No data available

**Health Hazards**

No data available

**Potential Environmental Effects**

No data available

**Other Hazards Which Do Not Result in Classification**

None known.

**Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS**

CAS	Component Name	Percent
1233937-39-7	Vitamin K1-[2H7]	90-100

**Section 4 - FIRST AID MEASURES****Description of Necessary Measures****Inhalation**

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

**Skin contact**

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing before reuse.

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Then get immediate medical attention.

**Ingestion**

If swallowed, get medical attention.

**Most Important Symptoms/Effects****Immediate**

respiratory tract irritation, skin irritation, eye irritation

**Delayed**

No information on significant adverse effects.

**Protection of first-aiders**

Wear suitable protective clothing. Perform first aid measures in a safe area.

**Note to Physicians**

Treat symptomatically and supportively.

**Section 5 - FIRE FIGHTING MEASURES****Suitable extinguishing media**

regular dry chemical, carbon dioxide, water spray, foam

**Material Name: Vitamin K1-[2H7]**  
**Revision date: 2022-08-24**

**Unsuitable Extinguishing Media**

high-pressure water streams

**Specific hazards arising from the chemical**

Slight fire hazard.

**Hazardous combustion products**

oxides of carbon

**Fire Fighting Measures**

Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with water spray until well after the fire is out. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Dike for later disposal.

**Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

**Section 6 - ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

Wear personal protective clothing and equipment.

**Environmental precautions**

Avoid release to the environment.

**Methods and Materials for Containment and Cleaning Up**

Eliminate all ignition sources if safe to do so. Do not touch spilled material. Stop leak if possible without personal risk. Prevent entry into waterways, sewers, basements, or confined areas. Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry.

**Secondary disaster prevention measures**

No data available

**Section 7 - HANDLING AND STORAGE****Precautions for safe handling**

Avoid breathing vapor or mist. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities**

None needed according to classification criteria.

Store and handle in accordance with all current regulations and standards. Store in a well-ventilated place.

Keep container tightly closed. Recommended storage temperature -20 °C. Keep separated from incompatible substances.

**Incompatible Materials**

oxidizing materials, bases

**Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines****Component Exposure Limits**

China, HongKong and ACGIH have not developed exposure limits for any of this product's components.

**Biological limit value**

There are no biological limit values for any of this product's components.

**Appropriate engineering controls**

Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

**Personal protective equipment****Respiratory Protection**

Respirators depend on exposure level. SCBA with full face piece recommended during change outs and available in case of emergency.

**Hand protection**

Wear appropriate chemical resistant gloves: NBR (Nitrile rubber).

Material Name: Vitamin K1-[2H7]

Revision date: 2022-08-24

**Eye/face protection**

Wear safety glasses with side shields. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin and Body Protection**

Wear appropriate chemical resistant clothing, lab coat. Wear slip-resistant shoes.

**Protective Materials**

Recommendations are based on the product type. Consult with an industrial hygienist to determine the appropriate PPE for your specific use of this material.

<b>Section 9 - PHYSICAL AND CHEMICAL PROPERTIES</b>
---

<b>Appearance</b>	yellow oil	<b>Physical State</b>	liquid
<b>Odor</b>	Not available	<b>Color</b>	yellow
<b>Odor Threshold</b>	Not available	<b>pH</b>	Not available
<b>Melting Point</b>	-20 °C	<b>Boiling Point</b>	Not available
<b>Boiling Point Range</b>	Not available	<b>Freezing point</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Flammability (solid, gas)</b>	Not flammable
<b>Autoignition Temperature</b>	Not available	<b>Flash Point</b>	Not available
<b>Lower Explosive Limit</b>	Not available	<b>Decomposition temperature</b>	Not available
<b>Upper Explosive Limit</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density (air=1)</b>	Not available	<b>Specific Gravity (water=1)</b>	0.999
<b>Water Solubility</b>	Not available	<b>Partition coefficient: n-octanol/water</b>	Not available
<b>Viscosity</b>	Not available	<b>Kinematic viscosity</b>	Not available
<b>Solubility (Other)</b>	Not available	<b>Density</b>	0.999 g/mL at 25 °C
<b>Physical Form</b>	liquid	<b>Molecular Formula</b>	C31(2H7)H39O2
<b>Molecular Weight</b>	457.74 (g/mol)		

<b>Section 10 - STABILITY AND REACTIVITY</b>
--

**Chemical stability**

Stable at normal temperatures and pressure.

**Possibility of hazardous reactions**

No known hazardous reactions.

**Material Name: Vitamin K1-[2H7]**

**Revision date: 2022-08-24**

**Polymerization**

Will not polymerize.

**Conditions to avoid**

Avoid contact with light. Avoid contact with incompatible materials.

**Materials to Avoid (Incompatibilities)**

oxidizing materials, bases

**Hazardous decomposition products**

oxides of carbon

<b>Section 11 - TOXICOLOGICAL INFORMATION</b>
---

**Component Analysis - LD50/LC50**

The components of this material have been reviewed in various sources and no selected endpoints have been identified.

**Acute Toxicity Estimate**

No data available.

**Immediate Effects**

respiratory tract irritation, skin irritation, eye irritation

**Delayed Effects**

No information on significant adverse effects.

**Skin Corrosion/Irritation**

respiratory tract irritation, skin irritation, eye irritation

**Severe Damage/Irritation of Eyes**

eye irritation

**Respiratory Sensitization**

No data available.

**Dermal Sensitization**

No data available.

**Germ cell mutagenicity**

No data available.

**Component Carcinogenicity**

None of this product's components are listed by Ministry of Health, ACGIH or IARC.

**Reproductive Effects**

No data available.

**Teratogenicity**

No data available.

**Specific Target Organ Toxicity - Single Exposure**

No target organs identified.

**Specific Target Organ Toxicity - Repeated Exposure**

No target organs identified.

**Aspiration hazard**

No data available.

**Medical Conditions Aggravated by Exposure**

No data available.

<b>Section 12 - ECOLOGICAL INFORMATION</b>
--

**Component Analysis - Aquatic Toxicity**

No LOLI ecotoxicity data are available for this product's components.

**Persistence**

No data available.

**Bioaccumulative potential**

No data available.

**Mobility in Environmental Media**

No data available.

Material Name: Vitamin K1-[2H7]  
Revision date: 2022-08-24

### Section 13 - DISPOSAL CONSIDERATIONS

**Disposal Methods**

Dispose in accordance with all applicable regulations.

**Component waste information**

There is no applicable waste information for this product's components.

**Contaminated packaging disposal**

Dispose in accordance with all applicable regulations.

### Section 14 - TRANSPORT INFORMATION

**IATA Information:**

UN#: Not regulated

**IMDG Information:**

UN#: Not regulated

**ICAO Information:**

UN#: Not regulated

**International Bulk Chemical Code**

This material does not contain any chemicals required by the IBC Code to be identified as dangerous chemicals in bulk.

**Special precautions**

None

### Section 15 - REGULATORY INFORMATION

**China Regulations****Law of the People's Republic of China on Prevention and Control of Occupational Diseases: Catalogue of Occupational Hazard Factors**

None of this product's components are on the list.

**State Administration of Work Safety (SAWS) - List of Dangerous Chemicals**

None of this product's components are on the list.

**List of Dangerous Chemicals for Priority Management**

None of this product's components are on the list.

**Dangerous Goods List (GB 12268-2012)**

None of this product's components are on the list.

**Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals: Catalog of Toxic Chemicals Severely Restricted From Import and Export**

None of this product's components are on the list.

**Hazardous Chemicals Control Ordinance (HongKong)**

None of this product's components are on the list.

**Controlled Chemicals Schedule (HongKong)**

None of this product's components are on the list.

**Information on International Conventions and Agreements****The Montreal Protocol on Substances that Deplete the Ozone Layer****Montreal Protocol**

No components of this material are listed.

**UNEP - Stockholm Convention - Persistent Organic Pollutants (POPs)****Stockholm Convention**

No components of this material are listed.

**UN/FAO/Rotterdam Convention - Chemicals Subject to Prior Informed Consent (PIC)**

No components of this material are listed.

**Component Analysis - Inventory**

Vitamin K1-[2H7] (1233937-39-7)

Material Name: Vitamin K1-[2H7]  
Revision date: 2022-08-24

US	CA	AU	CN	EU	JP - ENCS	JP - ISHL	KR KECI - Annex 1	KR KECI - Annex 2
No	No	No	No	No	No	No	No	No

KR - REACH CCA	MX	NZ	PH	TH-TECI	TW, CN	VN (Draft)
No	No	No	No	No	No	No

### Section 16 - OTHER INFORMATION

#### NFPA Ratings

Health: 1 Fire: 1 Instability: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### Preparation Date

8/24/2022

#### Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CA/MA/MN/NJ/PA - California/Massachusetts/Minnesota/New Jersey/Pennsylvania\*; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR - Code of Federal Regulations (US); CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EC - European Commission; EEC - European Economic Community; EIN - European Inventory of (Existing Commercial Chemical Substances); EINECS - European Inventory of Existing Commercial Chemical Substances; ENCS - Japan Existing and New Chemical Substance Inventory; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; F - Background (for Venezuela Biological Exposure Indices); IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; ISHL - Japan Industrial Safety and Health Law; IUCLID - International Uniform Chemical Information Database; JP - Japan; Kow - Octanol/water partition coefficient; KR KECI Annex 1 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL); KR KECI Annex 2 - Korea Existing Chemicals Inventory (KECI) / Korea Existing Chemicals List (KECL) , KR - Korea; LD50/LC50 - Lethal Dose/Lethal Concentration; KR REACH CCA - Korea Registration and Evaluation of Chemical Substances Chemical Control Act; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; MX - Mexico; Ne - Non-specific; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; Nq - Non-quantitative; NSL - Non-Domestic Substance List (Canada); NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PEL - Permissible Exposure Limit; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; Sc - Semi-quantitative; STEL - Short-term Exposure Limit; TCCA - Korea Toxic Chemicals Control Act; TDG - Transportation of Dangerous Goods; TH-TECI - Thailand - FDA Existing Chemicals Inventory (TECI); TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act; TW - Taiwan; TWA - Time Weighted Average; UEL - Upper Explosive Limit; UN/NA - United Nations /North American; US - United States; VLE - Exposure Limit Value (Mexico); VN (Draft) - Vietnam (Draft); WHMIS - Workplace Hazardous Materials Information System (Canada).

#### Training advice

Available upon request

**Material Name: Vitamin K1-[2H7]**  
**Revision date: 2022-08-24**

**Key literature references and sources for data**

Available upon request

**Other Information**

**Disclaimer:**

The information in this (Material) Safety Data Sheet ("(M)SDS") is believed to be current and accurate as of the time of shipment of the product by Entegris. Entegris makes no warranties, express or implied, with respect to such information, including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Entegris assumes no liability for any loss or injury which may result from the use of the information contained in this (M)SDS. The chemical, physical and toxicological properties of the Entegris product described in this (M)SDS have not been thoroughly investigated. Users are responsible for exercising due care in using the Entegris product, and for conducting their own investigation to determine whether the product is fit for their particular purpose and suitable for their method of use or application. It is the user's responsibility to ensure that its activities comply with all applicable laws and regulations. Entegris is a registered trademark of Entegris Inc. or an affiliated company. © 2015 Entegris Inc. or affiliated company. All rights reserved.