



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)
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.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

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

Section 10 - STABILITY AND REACTIVITY
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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

Section 11 - TOXICOLOGICAL INFORMATION

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.

Section 12 - ECOLOGICAL INFORMATION
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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

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