E-mail: gcat@matthey.com www.alfa-chemcat.com

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 29.07.2010 Revision: 29.07.2010

1 Identification of substance

Product details

Diethyl cinnamylphosphonate Trade name

B21108 Stock number:

Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG

Benzstrasse 3 D-76185 Karlsruhe / Germany

Product safety department.

Informing department: **Emergency information:** Giftnotruf Universität Mainz / Poison Information Center Mainz

www.giftinfo.uni-mainz.de Telefon:+49(0)6131/19240

2 Hazards identification

Hazard designation:

Information pertaining to particular dangers for man and environment

GHS label elements

Not applicable

void

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#) Diethyl cinnamylphosphonate (CAS#?): 100%

4 First aid measures After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice. After skin contact Instantly wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

Rinse opened eye for several minutes under running water. Then consult doctor. After eye contact

After swallowing Seek medical treatment.

5 Fire fighting measures

Protective equipment:

Suitable extinguishing agents Special hazards caused by the material, its products of combustion or flue gases:

Can be released in case of fire:

Carbon monoxide and carbon dioxide Phosphorus oxides Wear self-contained breathing apparatus.

Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection:

Measures for cleaning/collecting:

Additional information:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Do not allow material to be released to the environment without proper governmental permits. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

7 Handling and storage

Handling

Information for safe handling:

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. No special precautions necessary if used correctly.

Information about protection against

explosions and fires:

Keep ignition sources away - Do not smoke.

Requirements to be met by storerooms and containers:

Information about storage in one common

storage facility: Further information about storage

conditions:

No special requirements.

Store away from oxidizing agents.

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

Additional information about design of

technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require

monitoring at the workplace: Additional information:

Personal protective equipment General protective and hygienic measures

Not required. No data

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work.

Breathing equipment: Protection of hands: Use breathing protection with high concentrations.

Material of gloves

Check protective gloves prior to each use for their proper condition.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and

varies from manufacturer to manufacturer.

Eye protection:

Safety glasses Protective work clothing. Body protection:

GB

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 29.07.2010 Revision: 29.07.2010

Trade name Diethyl cinnamylphosphonate

(Contd. of page 1)

	(Conta. or page 1)
9 Physical and chemical properties:	
General Information	
Form: Smell:	Liquid Not determined
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	Not determined Not determined Not determined
Flash point:	Not determined
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Danger of explosion:	Product is not explosive.
Critical values for explosion: Lower: Upper:	Not determined Not determined
Steam pressure:	Not determined

10 Stability and reactivity

Density

Thermal decomposition / conditions to be

Materials to be avoided:

Dangerous reactions: Dangerous products of decomposition:

No decomposition if used and stored according to specifications. Oxidizing agents

Not determined

No dangerous reactions known Carbon monoxide and carbon dioxide Phosphorus oxides (e.g. P2O5)

11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin:

on the eye: Sensitizátion: May cause irritation May cause irritation

Additional toxicological information:

No sensitizing effect known.
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or

12 Ecological information:

Additional ecological information: General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations.

Uncleaned packagings:

Disposal must be made according to official regulations. Recommendation

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)
ADR/RID-GGVS/E Class: None

Maritime transport IMDG/GGVSea: IMDG/GGVSea Class: Marine pollutant:

None

Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class:

None

Transport/Additional information: Not dangerous according to the above specifications.

15 Regulatory information

Designation according to EC guidelines:

Observe the normal safety regulations when handling chemicals The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

National regulations

Information about limitation of use: For use only by technically qualified individuals.

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing data specification sheet: Health, Safety and Environmental Department.

Contact:
Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 29.07.2010 Revision: 29.07.2010

Trade name Diethyl cinnamylphosphonate

(Contd. of page 2)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
CAS: Chemical Abstracts Service (division of the American Chemical Society)