

MATERIAL SAFETY DATA SHEET

Product name: **CL-467**

Page : 1 of 7

Date : 16/12/2005

1 IDENTIFICATION OF THE SUBSTANCE

Commercial trade name : **Crosslinker CL-467**

Application : Aziridine based, polyfunctional crosslinker

Manufacturer : **MENADIONA, S.L.**
Mas Puigvert, s/n 08389 Palafolls
SPAIN

Telephone : (+34)-93.764.07.11

Fax : (+34)-93.764.07.25

E-mail : menadiona@menadiona.com

Web : <http://www.menadiona.com>

Emergency telephone : (+34)-93.764.07.11

2 CHEMICAL CHARACTERISATION

Chemical name : Aziridine based, polyfunctional crosslinker

Synonym : Crosslinker CL-467

CAS number : [64265-57-2]

EC number (EINECS) : 264-763-3

Composition / information on ingredients:

Concentration	Material	CAS number	Symbol	R-phrases
> 99%	Aziridine based, polyfunctional crosslinker	[64265-57-2]	Xn	R68, R41, R38, R43
< 0.01%	Propylene imine	[75-55-8]	F T+ N	R11, R45, R26/27/28, R41, R51/53

MATERIAL SAFETY DATA SHEET

Product name: **CL-467**

Page : 2 of 7

Date : 16/12/2005

3 HAZARDS IDENTIFICATION

Irreversible effects must be taken under consideration.

Risk of serious damage to eyes.

Irritating to skin.

May cause sensitisation by skin contact.

Exposure to high concentrations of mist may cause allergenic effects on the respiratory track.

4 FIRST AID MEASURES

Inhalation : Remove patient from exposure, keep lying avoiding coldness (cover with a blanket).
Seek medical attention.

Eye contact : Irrigate immediately with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes.
Seek medical attention. Continue irrigation until medical attention can be obtained.

Skin contact : Remove contaminated clothing and wash affected skin with soap and water.
Obtain medical attention.

Ingestion : Wash out mouth with water.
Seek medical attention.

Further medical Treatment : Symptomatic treatment and supportive therapy recommended.

5 FIRE FIGHTING MEASURES

Not classified as flammable. If involved in fire, it may emit noxious and toxic fumes.

Extinguishing media : Foam, CO₂, dry powder or water spray.

Special exposure Hazards : Material in itself is normally stable, but can become unstable at elevated temperatures and pressures

Special protection : Water may be used to cool closed containers and prevent pressure build-up.

MATERIAL SAFETY DATA SHEET

Product name: **CL-467**

Page : 3 of 7

Date : 16/12/2005

6 ACCIDENTAL RELEASE MEASURES

- Personal precautions : If insufficient ventilation, use appropriate respiratory kit.
Should be handled in such a way that there is no possibility of absorption by anyone handling them and that no personal contact can occur.
- Methods for cleaning : Absorb spillages with sand, earth or any suitable absorbent material.
Transfer to a container for removal.
Small spillages: Wash with 5% acetic acid
Large spillages: Drench with water
- Environmental precautions : Do not release to environment.
Notify authorities in case the substance has entered into a watercourse or sewer or been split on soil or vegetation.

7 HANDLING AND STORAGE

- Handling : Use only in well ventilated areas.
Avoid skin and eyes contact.
Should be handled in such a way that there is no possibility of absorption by anyone handling them and that no personal contact can occur.
- Storage : Keep container tightly closed.
Store in cool dry place.
Do not puncture containers or expose product to moisture.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure controls : Use only in well-ventilated areas.
Do not breathe vapour/spray.
Discard contaminated shoes.
Wash hands with soap and water.
Remove and wash contaminated clothing before re-use.
Product should only be used in well-controlled industrial applications and is not recommended to be used in other applications.
- Respiratory protections : In case of insufficient ventilation, use appropriate breathing kit.
- Hand protection : Rubber gloves.
- Eyes protection : Protection glasses.

MATERIAL SAFETY DATA SHEET

Product name: **CL-467**

Page : 4 of 7

Date : 16/12/2005

Skin protection : Clothes covering arms, legs and torso.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Clear yellowish liquid

Odour : Amine-like

pH (at 25°C) : 10.5

Melting point : - 30°C.

Boiling point : Unknown

Flash Point : >100°C (Seta Flash cc).

Softening point : Not applicable

Explosive limit : Not applicable

Oxidizing properties : Not applicable

Vapour pressure : Unknown

Relative density : 1.08 g/cm³ (20°C)

Solubility : Soluble in water

Viscosity : 200 mPa.s (25°C) (Brookfield)

10 STABILITY AND REACTIVITY

Stability : Material in itself is normally stable, but can become unstable at elevated temperatures and pressures.
Hydrolyses with water and with some release of energy, but not violently.
At 110°C after evaporation of the stabilizing amine, the crosslinker polymerises.

Conditions to avoid : Contamination with acidic materials.

Materials to avoid : Acidic materials, anhydrides, strong oxidizers.

Hazardous decomposition products : None known.

MATERIAL SAFETY DATA SHEET

Product name: **CL-467**

Page : 5 of 7

Date : 16/12/2005

11 TOXICOLOGICAL INFORMATION

- Inhalation : High concentrations of mist may cause allergenic effects on the respiratory track.
May cause irreversible effects.
- Ingestion : May cause irreversible effects.
LD50 rat (oral): 3038 mg/kg.
Low oral toxicity may cause irritation of gastro-intestinal track.
- Skin contact : Irritating to skin.
May cause sensitisation by the skin contact.
- Eye contact : Risk or serious damage to eyes.
May cause permanent damage if eyes are not immediately irrigated.
- Long term exposure :

12 ECOLOGICAL INFORMATION

- Ecotoxicity : Should not be released to environment.
- Other relating data : No information available.
- “Wassergefährdungsklasse” WGK 2 : hazardous to water

13 REMOVAL CONSIDERATIONS

Removal in accordance with local and general regulations. Incinerate in approved facilities.
Do not incinerate in closed container.

14 TRANSPORT INFORMATION

Not classified as hazardous for transport

- U.N. no :
- IATA Class :
- Packing group :
- IMO Class :

MATERIAL SAFETY DATA SHEET

Product name: **CL-467**

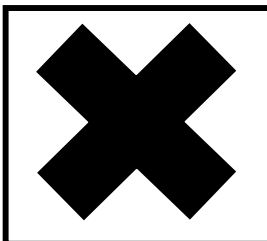
Page : 6 of 7

Date : 16/12/2005

IMDG Class :
Marine pollutant :
Proper shipping name : Not restricted
Additional information :

15 REGULATORY INFORMATION

Classification : Xn. Harmful



It contains Polyfunctional Aziridine Nr. CE 264-763-3

Risk Phrases : R68 Possible risk of irreversible effects.
R41 Risk of serious damage to eyes.
R38 Irritating to skin.
R43 May cause sensitisation by skin contact.

Safety Phrases : S26 In case of eyes contact, wash out immediately with plenty of water and seek medical attention.
S28 After skin contact , wash immediately with plenty of water
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S42 When fumigation/spraying use an appropriate breathing kit.

MATERIAL SAFETY DATA SHEET

Product name: **CL-467**

Page : 7 of 7

Date : 16/12/2005

16 OTHER INFORMATION

This Material Safety Data Sheet has been prepared in accordance with Directive Commission 2001/58 EEC, 67/548/EEC and 88/379/EEC, as its outstanding modifications, in approximation to the laws, regulations and administrative provisions related to the classification, packing and labelling of the hazardous materials and prepares.

The information contained herein is applicable solely to the chemical substance when used in manufacturing and does not relate to other use of the substance described.

Its use is intended for persons having technical skill and their own discretion and risk.

The information has been developed from sources considered reliable, but has not been independently verified. Therefore, the manufacturer cannot guarantee the accuracy of the information from these sources nor should the statements contained herein be considered an official expression.

No representation or warranty, expressed or implied, including the warranties of merchantable and fitness for a particular use is made with respect to the information contained herein.

Indicate variations with regard to the previous version.

Version: 004/2005/E replaces edition of 08/12/2004 version 003/2004/E