SAFETY DATA SHEET according to EC directive 93/112/EC

PRAESTOL K 144 L

Version 2 Revision date: 13.11.2003

Print date: 08.01.2004

degussa.

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING Product information

Product name : PRAESTOL K 144 L COMPANY : Stockhausen GmbH & Co. KG Bäkerpfad 25 47805 Krefeld Telephone : ++49-2151-38-1370 Emergency phone ++49-2151-38-1370 : Telefax ++49-2151-38-1647 • Use: : Flocculating aid.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterisation:

Description:	: Acrylamide/cationic acrylic acid derivative-copolymer as W/O- emulsion in isoparaffinic hydrocarbons
Hazardous components:	
Description:	: C-16-hydrocarbon, aliphatic
Percentage:	: ~25%
Symbol(s):	: XN
R-phrases:	: 65
Hazardous components:	
Description:	: Fatty alcohol polyglycol ether.
Percentage:	: <3%
Symbol(s):	: XI,N
R-phrases:	: 41-50
CAS-No.	: 68213-23-0
EINECS:	: POLYMER

3. HAZARDS IDENTIFICATION

Spilled product in contact with water or moisture causes surfaces to become extremely slippery In the case of prolonged contact with the skin or eyes irritation is possible. Due to acute aquatic toxicity, prevent spillage and disposal of product into natural waters.

4. FIRST AID MEASURES

Eye contact	:	Rinse with much water for a prolonged time - if ill effects occur seek medical advice.
Skin contact	:	Wash with water and soap. Take off contaminated clothing.
Ingestion	:	If ill effects occur seek medical advice immediately.

degussa.

Version 2 Revision date: 13.11.2003

Print date: 08.01.2004

RE-FIGHTING MEASURES		
Specific hazards during fire fighting	:	In case of fire carbon monoxide, nitrogen oxides
Special protective equipment for firefighters	:	no special requirements
Suitable extinguishing media	:	Water mist, foam, carbon dioxide, dry powder
CCIDENTAL RELEASE ME	ASU	RES
Personal precautions	:	Spilled product in contact with water or moisture causes surfaces to become extremely slippery
Environmental precautions	:	Prevent penetration into surface waters, sewers and ground. Take up with absorbent material and dispose of.
ANDLING AND STORAGE		
Handling		
Advice on protection against fire and explosion	:	no special requirements
Storage stability		
Champer the sector of the		
Storage temperature	:	-10 - 35 °C
XPOSURE CONTROLS / PE	RS	DNAL PROTECTION
XPOSURE CONTROLS / PE Components with workplace	RS	ONAL PROTECTION rol parameters
XPOSURE CONTROLS / PE	RS	DNAL PROTECTION
XPOSURE CONTROLS / PE Components with workplace Base	ERSC cont :	DNAL PROTECTION rol parameters MAK
XPOSURE CONTROLS / PE Components with workplace Base Remarks:	ERSC cont :	DNAL PROTECTION rol parameters MAK
XPOSURE CONTROLS / PE Components with workplace Base Remarks: Personal protection equipment	ERSC cont :	DNAL PROTECTION rol parameters MAK Not applicable.
XPOSURE CONTROLS / PE Components with workplace Base Remarks: Personal protection equipmen Hand protection	ERSC cont :	DNAL PROTECTION rol parameters MAK Not applicable. Note: Recommended. Use suitable gloves as a precaution. Material: butyl-rubber Permeation time: 480'
XPOSURE CONTROLS / PE Components with workplace Base Remarks: Personal protection equipmen Hand protection Prolonged exposure	ERSC cont :	DNAL PROTECTION rol parameters MAK Not applicable. Note: Recommended. Use suitable gloves as a precaution. Material: butyl-rubber Permeation time: 480' Thickness (mm): > 0,7 Material: nitrile gloves Permeation time: 30'

Version 2 Revision date: 13.11.2003

Print date: 08.01.2004

degussa.

Appearance	
Form	: liquid
Colour	: whitish
Odour	: slightly of ester
Other data	
Fusing temperature	: <-15 °C
Starts to boil at	: ~ 103 °C
Flash point	: >100,00 °C
Flash point	: >100
Upper explosion limit	: Not applicable.
Vapour pressure	: < 35 hPa at 20,0 °C
Density	: 1,03 g/cm ³ at 20,0 °C
Water solubility	: at 20,0 °C Soluble with a rise in viscosity.
рН	: 3,4 - 4
Solvent content	at 10,0 g/l (20,0 °C) : ~ 25 %
Viscosity, dynamic	: < 4.000,0 mPa.s at 20,0 °C
Viscosity, dynamic	: > 7,0 mPa.s at 40,0 °C
	VITY
Thermal decomposition	: stable under usual application conditions
	ΜΑΤΙΟΝ
Acute oral toxicity	: LD50 Mouse. Dose: > 5000 mg/kg Method: preliminary investigation
Further information	: No known detrimental effects on health known, In the case of

degussa.

Version 2 Revision date: 13.11.2003

Print date: 08.01.2004

prolonged contact with the skin or eyes irritation is possible.

Elimination information (p	ersistence and degradability)
Biodegradability	: Method: OECD 111 (EU C 7) Abiotic degradation: hydrolysis > 70% (28 d), equivalent to ready biodegradability according to 67/548/EEC Annex VI
Physico-chemical removability	: Because of its specific substantivity the product can be eliminated well in biological waste effluent treatment plants (binding on digestive sludge).
Toxicity to daphniae	 Daphnia magna EC50 >10 mg/l Exposure time: 48 h Method: OECD Nr. 202 Data of the active component. Information from literature
Fish toxicity	: LC50 > 1 -10 mg/l Exposure time: 96,00 h Method: OECD Nr. 203 Data of the active component. Information from literature
Further information	: Effects on aquatic organisms are attributable to the cationic charge the polymer. In natural surface waters this is neutralised by irreversible adsorption to particles and dissolved organic carbon. The reduces the toxicity in surface waters by more than 10-fold. Effects on aquatic organisms are due to an external (non-systemic) mode of action.
Further information	: Prevent concentrated product from penetrating into waters without biological waste water treatment.
DISPOSAL CONSIDERAT Product Contaminated packaging	 Dispose of whilst observing local legal regulations, e.g. in a suitable incineration plant. Undamaged packaging may be responsibly reused after proper
	cleaning.
	ON
TRANSPORT INFORMATI	

degussa.

Version 2 Revision date: 13.11.2003

Print date: 08.01.2004

15. REGULATORY INFORMATION

Labelling according to EEC Directive

General advice	:	not subject to compulsory marking
Hazardous component(s) for labelling	:	Safety data sheet available for professional user on request.
National legislation / regulat	ions	
Water contaminating class	:	2 (self classification)Law of mixtures (Annex 4 No. 3 VwVwS)
TA Luft (Germany)	:	Paragraph/Class: III (for the hydrocarbon)

16. OTHER INFORMATION

R-phrases referred to in chapter 2 and 3 - wording

R65 - Harmful: may cause lung damage if swallowed. R41 - Risk of serious damage to eyes., R50 - Very toxic to aquatic organisms.

Residual monomers	: acrylamide <0.05 %		
Alterations: section 2/15			
Datenblatt ausstellender Bereich: LTÖ/Produktsicherheit			

Contact Person: Services Krefeld/Laboratorium für Toxikologie und Ökologie/Produktsicherheit

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.