SAFETY DATA SHEET

SAPEG 400



SECTION 1: Identification of the substance/mixture and of the company/ undertaking

1.1 Product identifier	
Product name	: SAPEG 400
REACH Registration number	: polymer exempt
EC number	: 500-038-2
CAS number	: 25322-68-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Not applicable.		
Use of the substance/	: `	Various
mixture		

1.3 Details of the supplier of the safety data sheet

Supplier	: SABIC Petrochemicals B.V. Europaboulevard 1, Sittard P.O. Box 5151, 6130 PD Sittard The Netherlands
e-mail address of person responsible for this SDS	: sds.info@sabic-europe.com
Emergency telephone number	: +1-760-476-3961 (0h - 24h) SABIC Access Code: 333619

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mono-constituent substance <u>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</u> Not classified.

Classification according to Directive 67/548/EEC [DSD]

Not classified.

See Section 16 for the full text of the R phrases or H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements	
Hazard pictograms	÷
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.
Supplemental label elements	: Not applicable.
Special packaging requirem	<u>ents</u>
Containers to be fitted with child-resistant fastenings	: Not applicable.

SECTION 2: Hazards identification

Tactile warning of danger : Not applicable.

2.3 Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII	: №o. F: Not available. B: Not available. T: No.
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: Not available.
Other hazards which do not result in classification	: None known.

SECTION 3: Composition/information on ingredients

Substance/mixture	: Mono-constituent substance

			<u>Class</u>	<u>ification</u>	
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated 1 - 4.5 moles ethoxylated	EC: 500-038-2 CAS: 25322-68-3	>99	Not classified.	Not classified.	[A]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

[A] Constituent

[B] Impurity

[C] Stabilising additive

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eve contect	Immediately fluck every with plenty of water, econorienally lifting the upper and lower
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritatio occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

Potential acute health effects	
Eye contact :	No known significant effects or critical hazards.
Inhalation :	No known significant effects or critical hazards.
Skin contact :	No known significant effects or critical hazards.
Ingestion :	No known significant effects or critical hazards.

Date of issue/Date of revision : 8/13/2013.

SECTION 4: First aid measures

Over-exposure signs/sy	<u>/mptoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed				
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 			
Specific treatments	: No specific treatment.			

SECTION 5: Firefighting measures

5.1 Extinguishing media		
Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire. Use dry chemic alcohol-resistant foam or water spray (fog).	cal, CO ₂ ,
Unsuitable extinguishing media	None known.	
5.2 Special hazards arising	the substance or mixture	
Hazards from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may b	ourst.
Hazardous thermal decomposition products	Decomposition products may include the following materials: carbon dioxide carbon monoxide	
5.3 Advice for firefighters		
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the in the read is a fire. No action shall be taken involving any personal risk or withous suitable training.	
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contain breathing apparatus (SCBA) with a full face-piece operated in positive press mode. Clothing for fire-fighters (including helmets, protective boots and glo conforming to European standard EN 469 will provide a basic level of protective chemical incidents.	sure oves)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures				
For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.			
For emergency responders	: For specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".			
6.2 Environmental precautions	: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).			
6.3 Methods and materials for containment and cleaning up				
Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.			

SECTION 6: Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures Advice on general occupational hygiene	 Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
7.2 Conditions for safe storage, including any incompatibilities	: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
7.3 Specific end use(s) Recommendations	: Not available.
Industrial sector specific	: Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

solutions

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNEL = Derived No Effect Level

No DNELs available.

SECTION 8: Exposure controls/personal protection

PNEC = Predicted No Effect Concentration

No PNECs available.

8.2 Exposure controls						
Appropriate engineering controls	:	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.				
Individual protection measures						
Hygiene measures	:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.				
Eye/face protection	:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: safety glasses with side-shields				
Skin protection						
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. < 1 hour (breakthrough time): Rubber gloves., PVC				
Body protection	:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: lab coat / safety apron Not recommended: Leather gloves				
Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: ***TO BE TRANSLATED*** or PVC Boots.				
Respiratory protection	:	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.				
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.				

SECTION 9: Physical and chemical properties

9.1 Information on basic physica	al and chemical properties
<u>Appearance</u>	
Physical state	: Liquid. [Viscous liquid. Hygroscopic.]
Colour	: Colourless.
Odour	: Odourless.
Odour threshold	: Not available.
рН	: ₩.5 to 7.5 [Conc. (% w/w): 5%]
Melting point/freezing point	: 🗚 to 8°C
Initial boiling point and boiling range	: Not available.
Flash point	: Closed cup: >150°C
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Burning time	: Not applicable.

SECTION 9: Physical and chemical properties

Burning rate	1	Not applicable.
Upper/lower flammability or explosive limits	:	Not available.
Vapour pressure	1	Not available.
Vapour density	1	14 [Air = 1]Not applicable.
Relative density	1	Not available.
Density	:	1255 g/cm³ [20°C]
Solubility(ies)	1	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	:	260°C
Decomposition temperature	1	Not available.
Viscosity	1	Øynamic (room temperature): 112 to 124 mPa⋅s
Explosive properties	:	Not available.
Oxidising properties	:	Not available.

9.2 Other information

No additional information.

SECTION 10: Stabilit	y and reactivity
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: strong oxidising materials, strong acids and bases (high temperature)
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Poly(oxy-1,2-ethanediyl),α- hydro-ω-hydroxy- Ethane-1, 2-diol, ethoxylated	LD50 Oral	Guinea pig	15700 mg/kg	-
	LD50 Oral LD50 Oral	Mouse Rabbit	28915 mg/kg 26800 mg/kg	-

Conclusion/Summary : Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Poly(oxy-1,2-ethanediyl),α- hydro-ω-hydroxy- Ethane-1,2 -diol, ethoxylated 1 - 4.5 moles ethoxylated	Eyes - Mild irritant	Rabbit	-	-	-
	Skin - Mild irritant	Rabbit	-	-	-

SECTION 11: Toxicological information

Conclusion/Summary	
Skin	: Mildly irritating to the skin.
Eyes	: Mildly irritating to the eyes.
Respiratory	: Irritating to respiratory system.
Sensitisation	
Conclusion/Summary	: Not available.
Mutagenicity	
Conclusion/Summary	: Not available.
<u>Carcinogenicity</u>	
Conclusion/Summary	: Not available.
Reproductive toxicity	
Conclusion/Summary	: Not available.
Teratogenicity	
Conclusion/Summary	: Not available.
Specific target organ toxicit	
Not available.	<u>, , , , , , , , , , , , , , , , , , , </u>
	(repeated expective)
Specific target organ toxicit Not available.	<u>Y (repeated exposure)</u>
Not available.	
Aspiration hazard	
Not available.	
Information on the likely routes of exposure	: Routes of entry anticipated: Dermal.
Potential acute health effects	
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Symptoms related to the physical sectors and the sectors and the sector sectors and the sectors and the sectors and the sectors are set of the sectors and the sectors are set of the s	sical, chemical and toxicological characteristics
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Delayed and immediate effect	s and also chronic effects from short and long term exposure
Short term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health effe	<u>cts</u>
Not available.	
Conclusion/Summary	: Not available.
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects of critical hazards.
Mutagenicity	: No known significant effects of critical hazards.
mutagementy	
Data of issue/Data of revision	

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK) SAPEG 400

SECTION 11: Toxicological information

Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Other information : Not av

: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Poly(oxy-1,2-ethanediyl),α- hydro-ω-hydroxy- Ethane-1,2 -diol, ethoxylated	Acute LC50 >5000 mg/l	Fish - Carassius auratus	24 hours
Poly(oxy-1,2-ethanediyl),α- hydro-ω-hydroxy- Ethane-1,2 -diol, ethoxylated 1 - 4.5 moles ethoxylated	Acute LC50 >1000000 µg/l Fresh water	Fish - Salmo salar - Parr	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil	
Soil/water partition coefficient (K _{oc})	: Not available.
Mobility	: Not available.
12.5 Results of PBT and	vPvB assessment
PBT	: No.
	F: Not available. B: Not available. T: No.
vPvB	: Not available.
	vP: Not available. vB: Not available.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Methods of disposal : The generation of waste should be avoided or minimised wherever possible.	
Disposal of this product, solutions and any by-products should at all times co with the requirements of environmental protection and waste disposal legisla and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should disposed of untreated to the sewer unless fully compliant with the requirement all authorities with jurisdiction.	s comply gislation on- uld not be

SECTION 13: Disposal considerations

Hazardous waste	:	Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.
Packaging		
Methods of disposal	:	The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	-	This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

<u></u>					
	ADR/RID	ADN	IMDG	ΙΑΤΑ	
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	
14.2 UN proper shipping name	-	-	-	-	
14.3 Transport hazard class(es)	-	-	-	-	
14.4 Packing group	-	-	-	-	
14.5 Environmental hazards	No.	No.	No.	No.	
Additional information	-	-	-	-	

user

- 14.6 Special precautions for : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
 - : Not available.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation Substances of very high concern None of the components are listed. Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles **Other EU regulations Europe inventory** : All components are listed or exempted. **Black List Chemicals** : Not listed (76/464/EEC)

SECTION 15: Regulatory information

Priority List Chemicals (793/93/EEC)	Not listed	
Integrated pollution prevention and control list (IPPC) - Air	Not listed	
Integrated pollution prevention and control list (IPPC) - Water	Not listed	
Chemical Weapons Convention List Schedule I Chemicals	Not listed	
Chemical Weapons Convention List Schedule II Chemicals	Not listed	
Chemical Weapons Convention List Schedule III Chemicals	Not listed	
15.2 Chemical Safety Assessment	This product contains substances for which Chemical Safety Assessments are stil required.	I

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	 ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification Not classified.		Justification
Full text of abbreviated H statements	: Not applicable.	
Full text of classifications [CLP/GHS]	: Not applicable.	
Full text of abbreviated R phrases	: Not applicable.	
Full text of classifications [DSD/DPD]	: Not applicable.	
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Version	: 3	

Notice to reader

The information contained in the Safety Data Sheet is at the date of its issuance to the best of our knowledge correct according to the data available to us. The information is meant as a guideline for safe use, handling, disposal, storage and transport of products and does not imply any warranty (not implied nor explicitly) or specification. The Supplier shall to the extent permitted by law not be liable for any error or incorrectness in the information contained in this Safety Data Sheet. The information relates exclusively to the specified products, which may not be suitable for combination with other materials or use in processes other than those specifically described here.