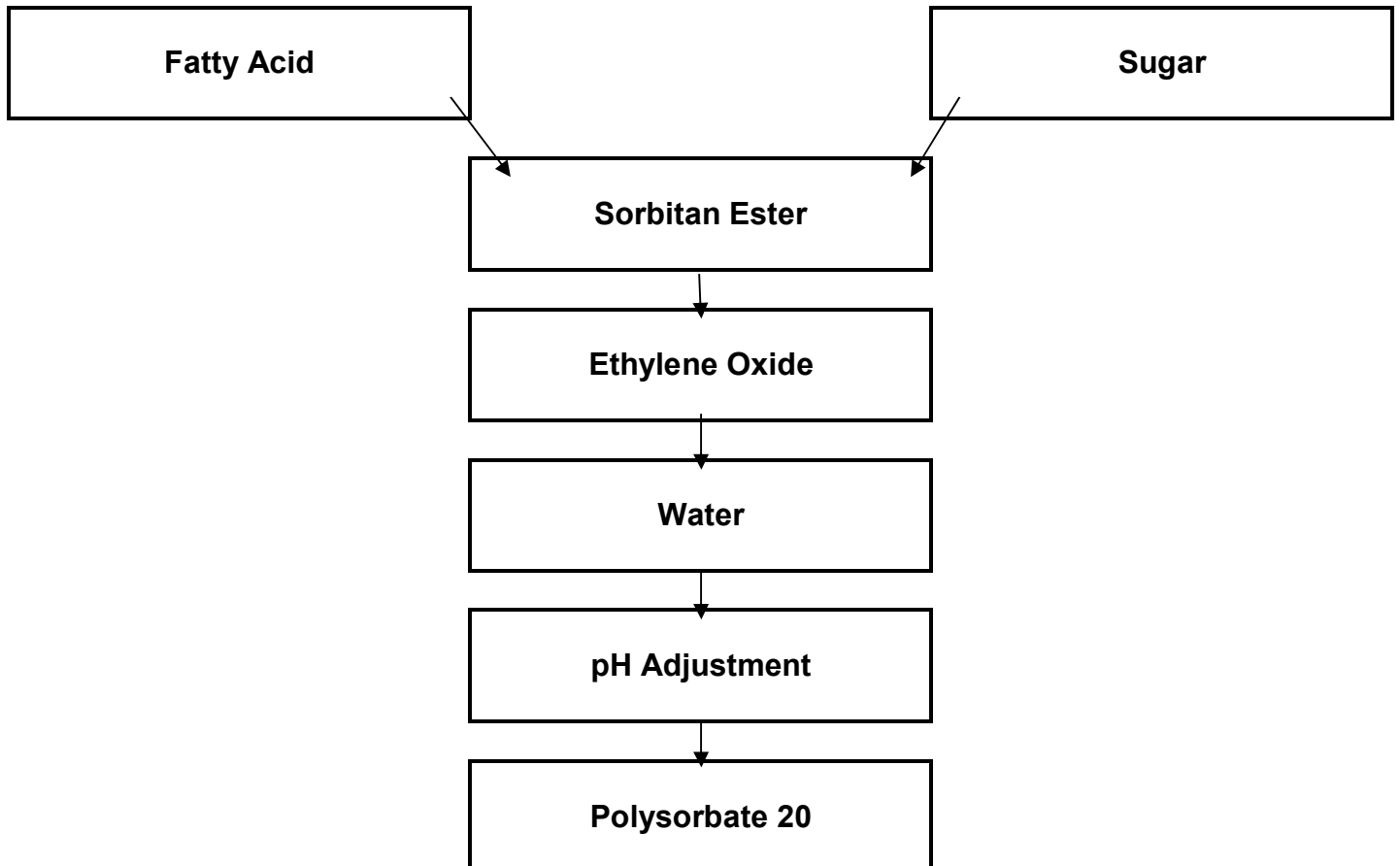


Certificate of Analysis

Product: Polysorbate 20

Test Method	Test	Analysis	Specification
	Appearance	Satisfactory	Amber Coloured Liquid
	Colour, Gardner	2.7	8 maximum
	Acid Value, mgKOH/g	1.50	2 maximum
	Saponification Value, mgKOH/g	45	40 - 50
	Hydroxyl Value, mgKOH/g	100	96 - 108
	pH (5% solution)	6.11	5.0 - 8.0
	% H2O (K.F)	2.6	3.0 maximum

Polysorbate 20 Process Flow Chart



Material Safety Data Sheet

Polysorbate 20

12/06/13

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

1.1. Product identifier

Identification of the substance

Trade name: Polysorbate 20

Trade code: POLY20

CAS number: 9005-64-5

The substance must not be registered according to REACH, Annex IV and V.

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

Recommended use:

Emulsifier

Formulation for cosmetic product

Industrial uses: Uses of substances as such or in preparations at industrial sites

Manufacture of fine chemicals

Formulation [mixing] of preparations and/or re-packaging

1.3. Details of the supplier of the safety data sheet

YouWish

Venserweg 21M

1112 AR Diemen

The Netherlands

Tel: +31 6 83295085

Email: info@youwish.nl

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

None.

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP). Adverse physicochemical, human health and environmental effects: No other hazards

2.2. Label elements Symbols:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards vPvB Substances: None - PBT

Substances: None Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Identification of the substance

Chemical characterization: SABOSORB MLE 100 KG

Trade code: POLY20

Product type and use: Emulsifier

CAS number: 9005-64-5

3.2. Mixtures

N.A.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

Treatment:

None

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures
 - Wear personal protection equipment.
 - Remove persons to safety.
 - See protective measures under point 7 and 8.
- 6.2. Environmental precautions
 - Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.
 - Retain contaminated washing water and dispose it.
 - In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.
 - Suitable material for taking up: absorbing material, organic, sand
- 6.3. Methods and material for containment and cleaning up
 - Wash with plenty of water.
- 6.4. Reference to other sections
 - See also section 8 and 13

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling
 - Avoid contact with skin and eyes, inhalation of vapours and mists.
 - Do not eat or drink while working.
 - See also section 8 for recommended protective equipment.
- 7.2. Conditions for safe storage, including any incompatibilities
 - Storage recommended at room temperature
 - Keep away from food, drink and feed.
 - Incompatible materials:
 - None in particular.
 - Instructions as regards storage premises:
 - Adequately ventilated premises.
- 7.3. Specific end use(s)
 - None in particular

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
 - No occupational exposure limit available
 - DNEL Exposure Limit Values
 - N.A.
 - PNEC Exposure Limit Values
 - N.A.
- 8.2. Exposure controls
 - Eye protection:
 - Not needed for normal use. Anyway, operate according good working practices.
 - Protection for skin:
 - No special precaution must be adopted for normal use.
 - Protection for hands:
 - Not needed for normal use.
 - Respiratory protection:
 - Not needed for normal use.
 - Thermal Hazards:
 - None
 - Environmental exposure controls:
 - None

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour: liquid yellow Odour:

N.A.

Odour threshold: N.A.

pH: NA

Melting point / freezing point: ca 15° C

Initial boiling point and boiling range: >

200° C Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Flash point: > 100 ° C

Evaporation rate: N.A. Vapour

pressure: N.A. Relative density: 1.10

Solubility in water: soluble Solubility in oil:
soluble

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A. Explosive properties:

N.A.

Oxidizing properties: N.A.

9.2. Other information

Miscibility: N.A. Fat Solubility:

N.A. Conductivity: N.A.

Substance Groups relevant properties N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the substance:

SABOSORB MLE - CAS: 9005-64-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Negative

c) serious eye damage/irritation:

Test: Eye Irritant - Route: Skin - Species: Rabbit Negative

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: Guinea pig Negative

f) carcinogenicity:

Test: Carcinogenicity - Route: Oral - Species: Rat Negative

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

a) acute toxicity;

b) skin corrosion/irritation;

c) serious eye damage/irritation;

d) respiratory or skin sensitisation;

e) germ cell mutagenicity;

f) carcinogenicity;

g) reproductive toxicity;

h) STOT-single exposure;

i) STOT-repeated exposure;

j) aspiration hazard.

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

SABOSORB MLE - CAS: 9005-64-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish > 100 mg/l

Endpoint: EC50 - Species: Algae > 100 mg/l

12.2. Persistence and degradability

None

SABOSORB MLE - CAS: 9005-64-5

Biodegradability: Readily biodegradable - Test: Biochemical oxygen demand - Duration:

N.A. - %: 80 - Notes: N.A.

12.3. Bioaccumulative potential

SABOSORB MLE - CAS: 9005-64-5

Bioaccumulation: Not bioaccumulative - Test: N.A. N.A. - Duration: N.A. - Notes: N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment vPvB

Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

14.6. Special precautions for user

N.A.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)
Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Dir. 2006/8/EC

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 453/2010 (Annex I)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Volatile Organic compounds - VOCs = 0.00 g/l

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.00

Where applicable, refer to the following regulatory provisions :

Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

15.2. Chemical safety assessment

No

SECTION 16: Other information

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage
of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American
Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical
Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling
of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport
Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation
Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous
Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.
(ACGIH Standard).

WGK: German Water Hazard Class.

Product Specification

Chemical description POE 20 sorbitan monolaurate

INCI/CTFA name POLYSORBATE 20

CAS number 9005-64-5

Country of Origin Holland

QUALITY CONTROL DATA

Anal. meth.

Appearance at 20°C	liquid	S001
Colour Gardner	6 max.	S002
K.F. water	3% max	S008
Hydroxyl value	96 ÷ 108	S013
Saponification value	40 ÷ 50	S065
Acidity value	2 max	S010
Free dioxane	1 ppm max	S061
Peroxide value	10 max	S127

ADDITIONAL PRODUCT DESCRIPTIVE DATA

Soluble in	water, alcohol
Insoluble in	paraffinic oils, vegetable oils
HLB	16,7

This products is derived from vegetable and synthetic raw materials.
- 2.3% is form vegetable part, mainly form palm derivates (palm kernel oil)

USE

Field of application O/W nonionic emulsifier, suitable for creams, liquid emulsions and as solubilizer for essential oils. Good dermatological properties.

STORAGE AND STABILIZATION

In the original unopened containers the product can be stored for at least 24 months, protected from moisture at below 35°C.

Information here written is based on our best knowledge. Who uses the product must be sure of its suitability according to the specific use of it. YouWish does not take any direct or indirect responsibility about an uncorrected usage of it. This card cancels and replaces every previous edition.

Vegetarian & Vegan Suitability Statement

PRODUCT NAME: POLYSORBATE 20

YouWish can confirm that the above listed product has not been tested in animals and does not contain dairy or any other animal product, by product or derivative and is therefore suitable for vegetarian and vegan use.

This product has not been tested on animals either on behalf of YouWish nor our supplier and meets the animal test ban date for cosmetic ingredients of 11th March 2009

12/06/19