



SAFETY DATA SHEET

[Required under safety and health regulations for shipping and handling]

Version: 2021
Date Updated: April 14, 2021

SECTION 1. ----- PRODUCT AND COMPANY IDENTIFICATION-----

Product Name Polyoxyethylene-20 (TWEEN 20)
Product Code(s) TB0560
Recommended Use For Laboratory Research Use Only
Not for Human or Animal Drug Use
Synonyms Polyoxyethylenesorbitan monolaurate* Polyethylene glycol sorbitan monolaurate

Supplier Bio Basic Inc.
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Canada, L3R 8T4
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For Chemical Emergency Phone# (416) 995 9730

SECTION 2. ----- HAZARDS IDENTIFICATION -----

Classification of the substance or mixture

Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements

Not a hazardous substance or mixture

Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----

Chemical Name	EC No.	CAS-No	Weight %
Polyoxyethylene-20 (TWEEN 20)	500-018-3	9005-64-5	95-100

No components need to be disclosed according to the applicable regulations.

SECTION 4. ----- FIRST-AID MEASURES-----

If inhaled

If breathed in, move person into fresh air.

In case of skin contact

Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

rinse out with plenty of water. Remove contact lenses.

If swallowed

make victim drink water (two glasses at most). Consult doctor if feeling unwell.

SECTION 5. ----- FIRE FIGHTING MEASURES -----

Suitable extinguishing media

Use Water Foam Carbon dioxide (CO2) Dry powder

Special hazards arising from the substance or mixture

Carbon oxides

Combustible liquid.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Development of hazardous combustion gases or vapours possible in the event of fire.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Prevent fire extinguishing water from contaminating surface water or the ground water system.

Explosion data - sensitivity to mechanical impact

no data available

Explosion data - sensitivity to static discharge

no data available

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -

Personal precautions

Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemisorb®). Dispose of properly. Clean up affected area.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -

Precautions for safe handling

For precautions see section 2.

Conditions for safe storage

Tightly closed.

Storage class (TRGS 510): 10: Combustible liquids

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -

Personal protective equipment

Respiratory protection

Not required; except in case of aerosol formation.

Eye/Face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin and body protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material tested: Dermatrill® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Change contaminated clothing. Wash hands after working with substance.

Control of environmental exposure

Do not let product enter drains.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -

Appearance

Form viscous
Color yellow

Safety data

pH 7
Melting point/freezing point Melting point: 98.9 °C (210.0 °F)
Boiling point > 100 °C > 212 °F
Flash point 275 °C (527 °F) at ca.1,013 hPa - Pensky-Martens closed cup –
DIN 51758
Ignition temperature no data available
Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure < 1.4 hPa at 20 °C (68 °F)
Density no data available
Water solubility 0.0002 g/l at 20 °C (68 °F) - OECD Test Guideline 105
Partition coefficient:
n-octanol/water no data available
Relative density 1.095 g/mL at 25 °C (77 °F)
Odour odorless
Odour Threshold no data available
Evapouration rate no data available

SECTION 10. -----STABILITY AND REACTIVITY -----

Reactivity

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions

No data available

Conditions to avoid

Strong heating.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data

SECTION 11. ----- TOXICOLOGICAL INFORMATION -----

Acute toxicity

LD50 Oral - Rat - 38,900 mg/kg
Remarks: (External MSDS)
LC50 Inhalation - Rat - male and female - 4 h - > 5.1 mg/l
(OECD Test Guideline 403)
Remarks: Limit Test (highest concentration to be prepared)
Dermal: No data available
No data available

Skin corrosion/irritation

Skin - Rabbit
Result: No skin irritation - 4 h
(OECD Test Guideline 404)

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

Maximization Test - Guinea pig
Result: Does not cause skin sensitization.
(OECD Test Guideline 406)

Germ cell mutagenicity

No data available
Ames test
Escherichia coli/Salmonella typhimurium
Result: negative

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Additional Information

RTECS: TR7400000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. ----- ECOLOGICAL INFORMATION -----

Toxicity

Toxicity to fish static test LL50 - Danio rerio (zebra fish) - > 100 mg/l - 96 h
(OECD Test Guideline 203)

Toxicity to daphnia
and other aquatic
invertebrates EC50 - Daphnia - > 10 mg/l - 48 h
Remarks: (above the solubility limit in the test medium)(Lit.)

Toxicity to bacteria microtox test EC50 - Bacteria - 146 - 774 mg/l - 5 min
Remarks: (Lit.)

Persistence and degradability

Biodegradability aerobic - Exposure time 28 d
Result: > 60 % - Readily biodegradable.
(OECD Test Guideline 301F)

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

Discharge into the environment must be avoided.

SECTION 13. ----- DISPOSAL CONSIDERATIONS -----

Product

Waste material must be disposed of in accordance with the national and local No mixing with other waste.
Handle uncleaned containers like the product See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

Contaminated packaging

Dispose of as unused product.

SECTION 14. ----- TRANSPORT INFORMATION -----

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. ----- REGULATORY INFORMATION -----

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

SECTION 16. ----- OTHER INFORMATION -----

Further information: no limited for paper copy, just for internal uses.
For research use only. Not intended for human or animal diagnostic or therapeutic uses.

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

Issuing Date: 14-Apr-2021

End of SDS



CERTIFICATE OF ANALYSIS

Product	Polyoxyethylene-20 (TWEEN 20)
Product Code	TB0560(DB0560)
Grade	Biotech
CAS#	9005-64-5
Lot No	

Test Items	Specifications	Actual Results
Appearance	Yellow to amber viscous liquid	
Hydroxyl Number	96 -108 mgKOH/g	
Moisture (KF)	≤3.0%	

Storage: Store at room temperature.