

Safety Data Sheet

according to Regulations 1907/2006/EC (REACH) and 2015/830/EU

REF: 91352

QUANTOFIX Total Sugar

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Printing date: 09.05.2017

Date of issue: 05.05.2017

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

1.1 Product identifier

REF 91352
 Product name QUANTOFIX Total Sugar

REACH Registration number(s): see SECTION 3.1/3.2 or
 A registration number for the substance(s) does not exist because the annual tonnage does not require registration or the substance or its use is excluded from registration.

1 x 25 mL Fru/Glu-1
 1 x 100 test strips

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

Relevant identified uses
 Product for analytical use.
 Exposure Scenario Classification according REACH, RIP 3.2 Codes: SU 0-2, PC 21, PROC 15, AC 0
 The exposure scenario is integrated into sections 1-16.
 If CE labelling: Product for in-vitro-diagnostic use (IVD) or Accessory for medical use
Uses advised against
 not described

1.3 Details of the supplier of the safety data sheet

Manufactured by:
 MACHEREY-NAGEL GmbH & Co. KG
 Neumann-Neander-Str. 6-8, 52355 Dueren, GERMANY
 Tel.: +49 2421 969 0 E-mail: msds@mn-net.com

1.4 Emergency telephone number

Outside Germany (DE): Call your regional Poisons Information Service or call local Life Saving Service.
 DE: Gemeinsames Giftinformationszentrum (GGIZ) 99089 Erfurt tel. +49 361 730 730

You find our current versions of SDS (22 languages) in Internet: <http://www.mn-net.com/MSDS>

SECTION 2: Hazard identification

2.0 Classification of the complete product

Directive 1999/45/EC

Symbols -
 R -

CLP Directive 1272/2008/EC
 GHS pictograms



GHS07

Signal word WARNING

Hazard identification	Hazard classes/categories
-----------------------	---------------------------

H315	Skin Irrit. 2
H319	Eye Irrit. 2

2.1 Classification of the substance or mixture

25 mL Fru/Glu-1


Directive 1999/45/EC

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Symbols - do not need labelling as hazardous
 CLP Directive 1272/2008/EC

GHS pictograms

 GHS07

Signal word WARNING

Hazard identification	Hazard classes/categories
H315	Skin Irrit. 2
H319	Eye Irrit. 2

100 test strips

Directive 1999/45/EC

Symbols - do not need labelling as hazardous

CLP Directive 1272/2008/EC

GHS pictograms - do not need labelling as hazardous
 Signal word -

No hazard class

2.2 Label elements

According 1999/45/EC small amounts of harmful and highly flammable preparations/mixtures have partly/completely exemption from labelling (no symbols F, O, Xn, Xi, N and no R and S phrases are necessary) until **25-125 mL/g**.

According **CLP (GHS)** inner packages must be only labelled with symbol(s) and product identifier (EU 1272/2008 Annex I - 1.5.1.2). Harmful chemicals/mixtures with signal word: **WARNING** must not be labelled with H and P phrases **until 125 mL** (EU 1272/2008 Annex I - 1.5.2).

25 mL Fru/Glu-1

Directive 1999/45/EC

Symbols:
 -
 -

CLP Directive 1272/2008/EC

GHS pictograms:



GHS07

Signal word: WARNING

100 test strips

Directive 1999/45/EC

Symbols:
 -
 -

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S 22
Do not breathe dust.

CLP Directive 1272/2008/EC
GHS pictograms:
do not need labelling as hazardous
Signal word: -

2.3 Other hazards

Possible Hazards from physicochemical Properties

In the case of pH values are less than 5 or higher than 9 then it is irritant.

Information pertaining to particular Risks to Human and possible Symptoms

Information pertaining to particular Risks to the Environment

Other Hazards

SECTION 3: Composition/Information on Ingredients

3.1 Substances or 3.2 Mixtures

25 mL Fru/Glu-1

Chemical:	<i>tris(hydroxymethyl)aminomethane</i>	CAS No.:	77-86-1
Concentration:	10 - <30 %		
Formula:	C ₄ H ₁₁ NO ₃		
Pseudonym:	Trometamol, 2-amino-2-(hydroxymethyl)-1,3-propanediol		
REACH Reg. No.:	---		
REACH Preregistration (for):	05-2114282063-55-0000 (2018)		
EC No.:	201-064-4		
RTECS:	TY2900000	MFCD:	00004679
TSCA Inventory:	listed		
KE No.:	KE-01403		
acc. 1999/45/EC:	R 36/38	acc. CLP (GHS):	H315, H319

100 test strips

Chemical:	<i>cellulose</i>	CAS No.:	9004-34-6
Concentration:	1 - <10 %		
Formula:	(C ₆ H ₁₀ O ₅) _n		
REACH Reg. No.:	exempt, Annex IV		
EC No.:	232-674-9		
RTECS:	FJ5691460		
TSCA Inventory:	listed		
KE No.:	KE-05339		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

Chemical:	<i>chemicals/mixture < 1%, no declaration necessary</i>	CAS No.:	-
Concentration:	0,1 - <1 %		
TSCA Inventory:	all <1%		
KE No.:	listed		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

Chemical:	<i>PVC foil (CAS 9002-86-2)</i>	CAS No.:	-
Concentration:	95 - <100 %		
TSCA Inventory:	listed		
acc. 1999/45/EC:	-	acc. CLP (GHS):	not necessary

3.3 Remarks

List of R, H and P phrases: see section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

Place insured person out of danger zone to fresh air immediately. Ensure quiet, warmth, and provide resuscitation if necessary. If necessary contact medical advice.

4.1.1 After SKIN Contact

Remove dust with wetted tissue. Remove contaminated clothing. Rinse the affected skin or mucous membrane thoroughly under running water. (If possible) use soap.

4.1.2 After EYE Contact

Rub dust with teardrops from eyes or: After contact with the eyes rinse thoroughly under running water with the eyelid wide open with eye washing bottle, eye douche or running water (protect intact eye).

4.1.3 After INHALATION of Vapours

After inhalation of foam or vapour fresh air should be inhaled. Keep airways free. After inhalation of dust fresh air should be inhaled.

4.1.4 After ORAL Intake

After oral intake lots of water should be drunk after it has been ingested.

4.2 Most important symptoms and effects, both acute and delayed

Avoid inhalation of dust. ---

4.3 Indication of any immediate medical attention and special treatment needed

No additionally recommendations. ---

SECTION 5: Firefighting measures

5.1 Extinguishing media

Fire extinguishers appropriate to the fire classification, and, if applicable, a fire blanket must be available in a prominent location in the work area. All extinguishers like FOAM, WATER SPRAY, DRY POWDER, CARBON DIOXIDE can be used.

5.2 Special hazards arising from the substance or mixture

Formation of hazardous and caustic vapour-air mixtures possible. ---

5.3 Advice for firefighters

No, for listed product. Product package burns like paper or plastic.

5.4 Additional Information

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Regular staff training is necessary.

6.2 Environmental precautions

not necessary

6.3 Methods and material for containment and cleaning up

Bind any escaping liquid with inert absorbent. Collect small amounts of leaked liquid and flush with water into drains.

6.4 Reference to other sections

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling in accordance with the test instruction, that comes with the product.

7.2 Conditions for safe storage, including any incompatibilities

The original product package of MACHEREY-NAGEL allows a safe storage.

Storage class (VCI): 11

Water hazard class (DE): 2

7.2.1 Requirements for Stock Rooms and Containers

Keep original product packages tightly closed during handling and storage.

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7.3 Specific end use(s)

Product for analytical use.
If CE labelling: Product for in-vitro-diagnostic use (IVD) or Accessory for medical use

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

25 mL Fru/Glu-1

Chemical: *tris(hydroxymethyl)aminomethane* CAS No.: 77-86-1

DNEL: 117.5_{inh} mg/m³
DNEL = Derived No-Effect Level (for workers)

PNEC(fresh water): no data mg/L
PNEC = Predicted No Effect Concentration

NIOSH: not listed
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: not listed

100 test strips

Chemical: *cellulose* CAS No.: 9004-34-6

TRGS 900 (DE): Staub 1.25 A / 4 E mg/m³
E/e respirable

SUVA(CH) MAK value: 3 a ppm
NIOSH: TWA 10 (total) / 5 (resp) mg/m³
[TWA] Time-weighted average to a reference period of 8 hours, [STEL] Short-term exposure limit related to a 15-minute period

OSHA: TWA 15 (total) / 5 (resp) mg/m³

Chemical: *chemicals/mixture < 1%, no declaration necessary* CAS No.: -

Chemical: *PVC foil (CAS 9002-86-2)* CAS No.: -

8.2 Exposure controls

The highest level of cleanliness must be maintained at the workplace.

8.2.1 Respiratory Protection

No additional recommendations.

8.2.2 Hand Protection

Yes, gloves according EN 374 (permeation time >30 min - level 2), consist of PVC, natural latex, Neopren, or Nitril (f.ex. from Ansell or KCL). Use for short times chemical resistant latex gloves with code EN 374-3 level 1.

8.2.3 Eye Protection

Yes, safety glasses according EN 166 with integrated side shields or wrap-around protection.

8.2.4 Skin Protection

Not necessary.

8.2.5 Personal Hygiene

Eating, drinking, smoking, taking snuff and storage of food in work areas and at outdoor workplaces is prohibited. Avoid contact with the skin, eyes and clothing. Rinse any clothing on which the substance has been spilled, and soak it in water. Wash hands thoroughly with soap and water when stopping work and before eating, and then apply protective skin cream.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

25 mL Fru/Glu-1

Appearance: liquid Colour: colourless Odor: odorless
pH: 7.5-8,5

100 test strips

Appearance: solid Colour: colored Odor: odorless

9.2 Other information

Relevant Properties of Substance Group

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SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

No known instability.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

10.5 Incompatible materials

Not necessary. Avoid contact with concentrated acids and oxidizing agents.

10.6 Hazardous decomposition products

In the original package all parts/all reagents are safety and separated stored. Decompositions are not observed during the expiration period under recommended conditions.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Following information is valid for pure substances. Quantitative data on the toxicity of this product are not available.

25 mL Fru/Glu-1

Chemical:	<i>tris(hydroxymethyl)aminomethane</i>	CAS No.:	77-86-1
TSCA Inventory:	listed	California Proposition 65 List:	not listed
Australia NICNAS:	not listed	Canada CEPA 1999:	DSL yes
Japan CSCL/PRTR:	not listed	Japan ISHL:	not listed
Japan PDSCL:	not listed		
South Korea TCCA:	not listed		
Korea Exist.Chem.Inventory:	KE-01403		
LD50 _{orl rat} :	5000 mg/kg		

100 test strips

Chemical:	<i>cellulose</i>	CAS No.:	9004-34-6
TSCA Inventory:	listed	California Proposition 65 List:	not listed
Exposure Routes:	inhalation, skin and/or eye contact		
Target Organs:	Eyes, skin, respiratory system		
Symptoms:	irritation eyes, skin, mucous membrane		
Australia NICNAS:	not listed	Canada CEPA 1999:	DSL yes
Japan CSCL/PRTR:	not listed	Japan ISHL:	not listed
Japan PDSCL:	not listed		
South Korea TCCA:	not listed		
Korea Exist.Chem.Inventory:	KE-05339		
LD50 _{orl rat} :	>5000 mg/kg		
LC50 _{ihl rat} :	>5800 ^{4h} mg/m ³		
LD50 _{drm rbt} :	>2000 mg/kg		

Chemical:	<i>chemicals/mixture < 1%, no declaration necessary</i>	CAS No.:	-
TSCA Inventory:	all <1%		
Korea Exist.Chem.Inventory:	listed		

Chemical:	<i>PVC foil (CAS 9002-86-2)</i>	CAS No.:	-
TSCA Inventory:	listed		

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SECTION 12: Ecological information

12.1 Toxicity

Following information is valid for pure substances.

25 mL Fru/Glu-1

Chemical:	<i>tris(hydroxymethyl)aminomethane</i>	CAS No.:	77-86-1
PNEC(fresh water) :	no data mg/L		
PNEC = Predicted No Effected Concentration			
LC50 _{fish/96h} :	LD0 (4d): 1-10 g/L		
EC50 _{pseudokirchneriella subcapitata/72h} :	397;48h: 473 mg/L		
EC10 _{pseudomonas putita/16h} :	13h g/L		
Water hazard class (DE):	2		
Dispersion coefficient(octanol-water) :	-1.56		
Storage class (VCI):	12-13		

100 test strips

Chemical:	<i>cellulose</i>	CAS No.:	9004-34-6
Water hazard class (DE):	nwg		
Storage class (VCI):	11		

Chemical:	<i>chemicals/mixture < 1%, no declaration necessary</i>	CAS No.:	-
Water hazard class (DE):	1		
Storage class (VCI):	12-13		

Chemical:	<i>PVC foil (CAS 9002-86-2)</i>	CAS No.:	-
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12.2 Persistence and degradability

not necessary

12.3 Bioaccumulative potential

not necessary

12.4 Mobility in soil

not necessary

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no additional data available

SECTION 13: Disposal considerations

Please observe local regulations for collection and disposal of hazardous waste and contact waste disposal company, where you will obtain information on laboratory waste disposal (waste code number 16 05 06).

13.1 Waste treatment methods

SECTION 14: Transport information

14.1 - 14.4: No dangerous goods according the transport regulations

14.5 Environmental hazards

not necessary

14.6 Special precautions for user

not necessary

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

not applicable

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SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

German act governing protection from hazardous substances (Chemicals Act / Chemikaliengesetz- ChemG), revised on August 2013
 German order governing protection from hazardous substances (Ordinance on Hazardous Substances / Gefahrstoffverordnung - GefStoffV), revised on November 2010, according to Directive 98/24/EC
 TRGS 200, German engineering rules governing the classification and labelling of hazardous substances, preparations and products, updated October 2011

15.2 Chemical safety assessment

not necessary for these small amounts ---

SECTION 16: Other Information

16.1 List of R, H and P phrases

16.1.1 List of relevant R phrases

R36/38 Irritating to eyes and skin.

16.1.2 List of relevant H phrases

H315 Causes skin irritation.
 H319 Causes serious eye irritation.

16.1.3 List of relevant P phrases

P280sh Wear protective gloves/eye protection.

16.2 Training Advice

Regular safety training.

16.3 Recommended Restriction on Use

Only for professional user.
 An individual package of this product or test kit has a moderate hazardous potential.

16.4 Further Information

MACHEREY-NAGEL GmbH & Co. KG provides the information contained herein in good faith being up-to-date of own realizations at revision time. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose.

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16.5 Sources of Key Data

Regulation 453/2010/EU REACH - REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS
 Regulation 487/2013/EU, 4th adaptation of CLP regulation to technical and scientific progress
 TRGS 900, German engineering rules governing limits in air at work, updated September 2016
 SUVA .CH, Limits in air at work 2009, revised on 01.2009
 KÜHN, BIRETT Merkblätter Gefährliche Arbeitsstoffe (Data Sheets of Hazardous Substances)

Revisions/Updates

Reason for Revision: 2016-03 Adaptation of regulation 1221/2015/EU